

BUSINESS WEEK

JUNE 5, 1948



Camille Gutt: His problem — a new pattern of exchange rates (page 6)

BUSINESS
WEEK
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"...and after the fire, a still small voice"

WE have tried everything else in America, and they have all failed—labor contracts, new laws by the score, price controls.

We have tried everything else except conscience.

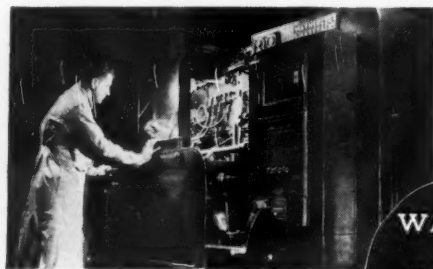
What if the still small voice of conscience induced workmen to produce more, before they demanded higher wages?

What if the still small voice of conscience induced manufacturers to deliver more and more *value*, constantly?

What if the still small voice of conscience induced government officials to decide every act only on—what is best for America, instead of "what is best for me"?

Then there would be no ruinous prices, there would be no international problem, there would be no fear. America would be strong again.

Is it too much to hope? The only alternative is destruction. It begins with you and me. We have had greed and quarrels and failures. . . Can't we have, "—after the fire, a still small voice"?



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&
SWASEY**
Machine Tools
Cleveland



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Crystal clear ice cubes for hotels, clubs, restaurants, institutions, produced at rate of 8000 per day. These cubes with the hole are frozen from running water at savings as high as 75%.

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From Water to Ice Flakes in 60 Seconds! The York FlakIce Machine provides a business with its own independent supply of frosty ribbons of fresh, clean ice—as pure as the water from which they're frozen. For hotels, restaurants, hospitals, dairies, meat plants, bakeries and other quantity users.

YORK *Refrigeration and Air Conditioning*



HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

COMMERCIAL PRODUCTS AT THE NEAREST YORK DISTRIBUTOR

How continuously it works
is what counts

Illustrated here is a handling operation which is typical of the work some trucks perform throughout every shift... 24 hours a day! Under such circumstances every delay for servicing or repairs means lost time, lost income.

The logical truck for such work is an electric truck. Its motor drive stays on the job because it has few wearing parts... only one basic moving part.

The logical battery to power the truck is an EDISON Nickel-Iron-Alkaline Battery. With steel cell construction inside and out, an electrolyte that is a preservative of steel, and a foolproof electrochemical principle of action, EDISON Batteries are the longest-lived, most durable and most trouble-free of all.

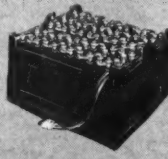
For long years of dependable service, equip your trucks with EDISON Batteries. They're built stronger and last longer!

ADVANTAGES OF EDISON NICKEL-IRON-ALKALINE BATTERIES:
Durable mechanically; foolproof electrically; easy to maintain;
withstand temperature extremes; can stand idle without injury.



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Nickel • Iron • Alkaline
STORAGE BATTERIES



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BUSINESS WEEK • June 5, 1948

THE SEE-SAW WE SAW!

by Mr. Friendly



You may say, "What is a reputable 60-year-old insurance company doing, playing see-saw?" Go ahead. Say it!

Now you've got that off your chest, we'd like to tell you, this American Mutual see-saw is something new! When we make accidents go *down* in a company, profits go *up*. In reducing dangerous hazards we helped production rise 300% for one manufacturer.

We call our remarkable see-saw, *I. E. Loss Control**
... a special service offered at no extra charge with every industrial policy!

If you still won't believe this see-saw works... ask your local American Mutual man to show you "The 40 Convincing Cases." You'll be very, very convinced.

AMERICAN MUTUAL

... the first American liability insurance company



1949. AMERICAN MUTUAL LIABILITY INSURANCE COMPANY

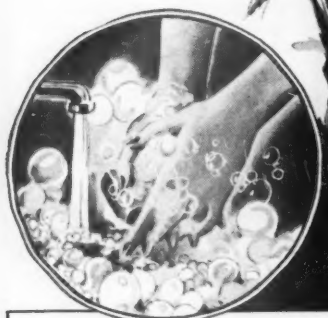
P.S. In these days of rising prices, it's good to remember... American Mutual still gives you the chance to save 20% on premiums! Write today for your free copy of "The All-American Plan for Business" and "The All-American Plan for the Home." American Mutual Liability Insurance Co., Dept. B-48 142 Berkeley St., Boston 16, Mass. Branches in principal cities. Consult classified telephone directory.
*Accident prevention based on principles of industrial engineering.

TELEPHONE TOURS



CHILE'S LAKE DISTRICT, CALLED "THE SWITZERLAND OF AMERICA," IS ONE OF THE WORLD'S MOST PICTURESQUE PLAYGROUNDS.

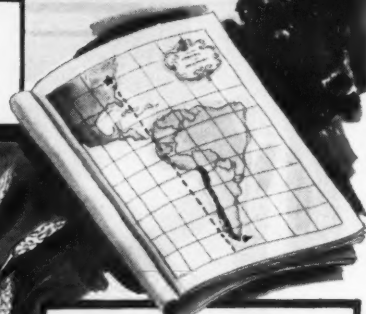
IN SPITE OF ITS MOUNTAINOUS TERRAIN ONE OF CHILE'S LEADING INDUSTRIES IS AGRICULTURE. 2,000,000 ACRES OF WHEAT ALONE.



YOUR LAUNDRY SOAP AND THE BORIC ACID IN YOUR MEDICINE CLOSET MAY CONTAIN BORAX FROM CHILE'S BORAX LAKE... WORLD'S LARGEST.



HIGHEST MOUNTAIN IN THE WESTERN HEMISPHERE IS ACONCAGUA (23,000 FT.) ON CHILE-ARGENTINE BORDER.



BY DRAWING A LINE SOUTH YOU WILL EASILY SEE THAT THE REPUBLIC OF CHILE, ON THE WEST COAST OF SOUTH AMERICA, IS ENTIRELY EAST OF WASHINGTON, D.C.



LIBERATOR OF CHILE FROM SPANISH OVERLORDSHIP WAS BERNARDO O'HIGGINS... SON OF AN IRISHMAN.

• Telephone communication helps bring good neighbors closer together. Overseas Telephone Service between Chile and the United States began April 3, 1930.

★
BELL SYSTEM
OVERSEAS
TELEPHONE SERVICE



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THE COVER

A little more than two years ago, the 46-nation International Monetary Fund opened for business in Washington. Ever since, Belgian-born Camille Gutt—its managing director—has been preaching the gospel of cooperation in international finance.

• **New Hope**—But it is only now, with establishment of the Economic Cooperation Administration, that his gospel has a real chance of taking hold.

The job cut out for 63-year-old Gutt is to get European countries whose currencies are over-valued to adopt realistic exchange rates. And this job has to be done without setting off the kind of competitive devaluation that became standard practice after the world left the gold standard in 1931.

What's needed is a return to established parities between and among the franc and the zloty, the lira and the pound, the dollar and the peso, and so on down the line.

• **Noncooperation**—The trouble is that the Fund can only recommend. And often—for various economic and political reasons—governments will refuse to go along.

This is where ECA comes in. It holds the purse-strings of Marshall-Plan money. And when ECA boss Hoffman's thinking tallies with Gutt's—which is likely to be often—Hoffman's voice will bring eloquent support. Last week ECA was digging into the problem with the help of some top-flight financial experts from U. S. banks.

• **The Right Man**—If anyone can handle this ticklish job, it's Camille Gutt. A barrister and journalist turned financial statesman, his name is a byword in financial circles here and abroad.

During the war, in London, he held down several posts for the Belgian government in exile—among them the Ministry of Finance. It was then that he worked out his plan for the economic recovery of Belgium, a plan that soon lifted his homeland from pauper to prince among the nations of Europe.

BUSINESS OUTLOOK

BUSINESS WEEK
JUNE 5, 1948



Business moves toward the second half of 1948 in high good spirits.

Production in most lines continues brisk (page 19). Consumers still have plenty of money and definite intentions to spend it (page 23).

And prices are inching higher—which generates inventory profits, induces a rosy glow (as long as the rise doesn't get out of hand).

•
Efforts to hold the line on steel prices are weakening.

The recent price cut wasn't popular with all producers (page 25). It was accepted to avert a wage rise. Now that wages in other industries are going up, steel may make an "adjustment" on pay or on "benefits" (page 94).

Freight rates are up; coal presumably will go up.

One mitigating factor: More scrap is coming out with good weather; prices aren't down, but deals at premium prices are disappearing.

•
One day's price advances: A major producer raised woven rugs. A coal company advanced anthracite (at a time when prices usually are lowered to get bins filled in summer). And coke was marked up.

•
Widespread price reductions are not signaled by the sale book put out by Sears, Roebuck & Co. a few days ago. Despite the headlines, this wasn't the summer catalog.

The cuts listed are on isolated items. In many cases, they represent clearances to move stock before the big catalog comes out.

•
Business has its cross-currents, but they aren't very serious. A single day's corporation news produced these samples:

One company proposed to split its common stock; another's stockholders approved a similar splitup.

Two concerns omitted common dividends; another cut its payment. A big railroad reported a thumping April loss due to the coal strike.

•
"Business is 'good' today, not only in retail trade but also in most other fields as well. It is apt to be 'good' tomorrow, but it would be better the day after tomorrow if it were not so 'good' today."

This is a preachment by the Federal Reserve Bank of Philadelphia.

What the Philadelphia Reserve Bank is driving at is this: If people had spent less while prices were rising in 1947, and had saved more, there would be scant danger of a tumble "the day after tomorrow."

In short, consumers have sustained the sellers' market.

•
Consumer credit goes right on from one new high to another. The April figure was \$13,596-million, up \$241-million from March.

This, however, should not yet be any great cause for concern. Such debt now compares with disposable consumer incomes of \$186-billion (first quarter's annual rate). In 1939, it was \$8-billion against \$70-billion.

In other words, consumer credit now represents only about 7% of disposable income; in 1939, it was 11%.

Moreover, auto instalment sales still are below 1940 and 1941.

•
Optimism is running high over prospects of a big corn crop in 1948. A lot of dire things can happen between now and September, of

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
JUNE 5, 1948

course. Yet, the seed went in on time and under virtually perfect moisture conditions in most areas. Many fields are up to good stands.

That's quite different from 1947 when the short corn crop put the squeeze on all grains. Thus, there seems no need to conserve new-crop wheat on anything like the scale practiced in the season now ending.

If wheat tops 1.1-billion bu., there will be well over 300-million bu. available for export in the 1948-49 season. And that's after making liberal allowance for home use—including brewing and distilling.

•
Europe will continue to get a lot of U. S. grain in spite of better crops on the continent.

The July export goal has just been set at 40.7-million bu., mostly wheat.

That's down from 75.6-million bu. actually shipped in July, 1947. Yet it's right up to the recent average. And remember: July, 1947, was an extreme emergency—politically, as well as nutritionally.

•
Rains over the last half of May will raise winter wheat production somewhat. In many areas, however, the rains came too late to help much.

Some seared wheat already has been turned under to make way for other late-planted crops. Moisture will help these new seedings.

As for wheat, the official weekly weather report on Tuesday spoke only of rain "checking deterioration" in the southern Great Plains.

The Santa Fe Ry., which has a dollars-and-cents interest, talks of "confusion in estimating the wheat crop." Its June 1 review, nevertheless, sees the likelihood of some better-than-expected results.

•
Spring wheat progress has been favorable in most areas other than the flooded Pacific Northwest. In Washington and Oregon, farmers simply won't be able to plant as much acreage as originally intended.

•
Transportation once more is becoming critical to wheat producers.

Early winter wheat already is coming to market. The main harvest will start before long now.

The railroads began to ready themselves for this weeks ago. Boxcars have been hustled back to the granger roads. The result is more cars on hand in the wheat country than a year ago.

Two helpful factors: (1) The crop will be smaller than last year's record breaker, and (2) with prices only a mite up from the support level, farmers will hold a good bit of wheat rather than sell and ship.

Thus, the strain on the railroads, while severe, won't be too great.

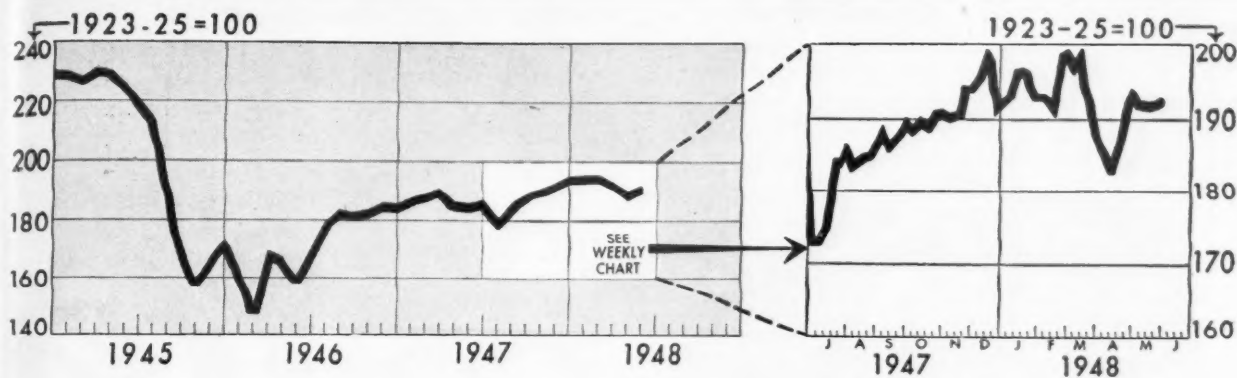
Shippers in other parts of the country will be pinched, though. Only saving grace is that boxcars haven't been particularly short. Big headache has been the supply of gondolas and hoppers.

•
Several synthetic fibers already are commercial competitors in textile—Nylon, Fiberglas, Aralac, Vinyon, Saran. Others are coming.

Yet the only one that has made any real dent on the market is rayon. In poundage, this synthetic supplied 12% of the textile market in 1947. It topped wool (10.1% of poundage), jute (9.9%), silk (0.1%). And rayon output has yet to catch up with demand.

Still, cotton is king. It continues to reign over nearly 60% of the market.

FIGURES OF THE WEEK



Business Week Index (revised; see page 21)

PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1941 Average
Steel ingot operations (% of capacity).....	96.0	96.8	91.0	97.0	97.3
Production of automobiles and trucks.....	92,105	+91,138	102,967	79,315	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$24,214	\$22,299	\$24,079	\$19,034	\$19,433
Electric power output (million kilowatt-hours).....	5,076	5,085	5,042	4,429	3,130
Crude oil (daily average, 1,000 bbls.).....	5,452	5,439	5,413	5,024	3,842
Bituminous coal (daily average, 1,000 tons).....	2,278	+2,208	1,926	2,128	1,685

TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	81	79	81	84	86
All other carloadings (daily average, 1,000 cars).....	65	62	61	64	52
Money in circulation (millions).....	\$27,700	\$27,690	\$27,682	\$28,211	\$9,613
Department store sales (change from same week of preceding year).....	+7%	+8%	+11%	+13%	+17%
Business failures (Dun & Bradstreet, number).....	112	92	106	72	228

PRICES (Average for the week)

Spot commodity index (Moody's, Dec. 31, 1931=100).....	426.9	425.7	415.8	395.0	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	275.5	275.3	274.3	259.7	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	393.7	389.7	371.5	344.1	148.6
Finished steel composite (Steel, ton).....	\$80.27	\$80.27	\$81.14	\$69.82	\$56.73
Scrap steel composite (Iron Age, ton).....	\$40.66	\$40.66	\$40.42	\$31.17	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	21.500¢	21.500¢	21.500¢	21.981¢	12.022¢
Wheat (Kansas City, bu.).....	\$2.36	\$2.39	\$2.39	\$2.75	\$0.99
Sugar (raw, delivered New York, lb.).....	5.25¢	5.14¢	5.20¢	6.19¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	37.80¢	37.78¢	37.37¢	36.26¢	13.94¢
Wool tops (New York, lb.).....	\$1.995	\$1.977	\$1.833	\$1.391	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	22.78¢	23.31¢	23.43¢	17.22¢	22.16¢

FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	132.8	131.4	123.3	114.5	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.34%	3.35%	3.43%	3.20%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.75%	2.76%	2.77%	2.53%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1½%	1½%	1½%	1½-1½%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1½%	1½%	1½%	1%	1½%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	46,856	46,440	46,671	46,314	++27,777
Total loans and investments, reporting member banks.....	63,129	63,456	62,940	63,239	++32,309
Commercial and agricultural loans, reporting member banks.....	14,206	14,208	14,159	11,792	++6,963
Securities loans, reporting member banks.....	1,838	1,574	1,558	2,178	++1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks.....	35,298	35,866	35,475	39,220	++15,999
Other securities held, reporting member banks.....	4,199	4,234	4,305	4,004	++4,303
Excess reserves, all member banks.....	710	330	880	520	5,290
Total federal reserve credit outstanding.....	21,201	20,674	20,952	22,019	2,265

*Preliminary week ended May 29th.

†Revised.

‡Date for "Latest Week" on each series on request.
 ††Estimate (B.W.—Jul. 12'47, p. 16).

GRINNELL PROTECTION WOULD HAVE PREVENTED THIS



After the fire, what can you tell *THEM*...?

NATURALLY YOU ARE THE BIG LOSER when your business burns.

But if people have trusted you and have left managerial judgment up to you, you'll find that you have to answer not only to yourself but to a whole community if you have been lax about fire control.

For instance, what can you say to the fire chief, one of whose men was seriously injured in the fire? He has warned you repeatedly that, although your building may be fire-proof, the contents may be virtually tinder.

How would you answer your cashier who has told you time and again that your indemnity check will not

cover re-building costs at today's advanced prices? Or that statistically 2 out of 5 businesses with records destroyed by fire never get started again.

How would you explain to the skilled men who have helped you build your business and now must, for their families' sakes, go elsewhere and get established again?

THERE IS ONLY ONE ANSWER: you must be prepared for fire before it strikes. You can *never* hope to prevent fire from starting. But you can be prepared to prevent fire from causing material damage. You can successfully control fire, whenever and wherever it strikes, night or

day, without fail, through Grinnell Protection by automatic sprinklers. Competent authorities will attest that Grinnell Protection by automatic sprinklers is the surest way. In addition, Grinnell Protection usually pays for itself in reduced insurance premiums in a few years. So, if you're insured, you're paying for Grinnell Protection. . . . *Why not have it?* Grinnell Company, Inc., Providence 1, R. I. Branch offices in Principal Cities.



GRINNELL

AUTOMATIC SPRINKLER AND SPECIAL HAZARD
FIRE PROTECTION

WASHINGTON OUTLOOK



THE TRUMAN ADMINISTRATION is a house bitterly divided; the split centers on Palestine. So deep has the bitterness cut that people are wondering how long Marshall and Forrestal can stay on.

It's this feud running among Truman's top advisers that accounts for the vacillation of U. S. policy on Palestine—from partition, to trusteeship, to recognition, to truce.

Stripped down, it's a tug-of-war between (1) the brass hats and striped pants, and (2) the White House crowd and the big city politicians.

It's Forrestal and Marshall against Clark Clifford, David K. Niles, and Ed Flynn. Niles, you'll remember, is one of the "anonymous" but influential presidential assistants, the specialist on minority problems.

To understand this mess, you have to go back to early spring. Forrestal, with Marshall's backing, talked Truman into abandoning the U. S.-dictated partition program, proposing trusteeship instead.

Forrestal feared fighting that would:

- (1) Disrupt Middle East oil supply for the Navy and the Marshall Plan.
- (2) Jeopardize U. S. plans for a string of air bases across the Arab world.

Clifford and Niles were furious at this brass hat coup. But for a while, until it became obvious that trusteeship wouldn't prevent trouble either, they couldn't get Truman's ear.

Ed Flynn tipped the balance. He came down from The Bronx last month and told Truman: If you want New York's 98 votes at Philadelphia, you've got to get back of the Jews' determination to have a state of their own.

So Truman did another flip-flop and recognized Israel.

Here's how these things are worked:

Clifford was sent to tell Marshall that Truman was going to recognize Israel—and quickly, to get the jump on Russia.

Marshall acceded; he said he would need 48 hours for the diplomatic amenities of notifying Britain and the rest.

Clifford reported Marshall's agreement, forgot about the 48-hour angle. Truman acted 21 minutes after Israel was proclaimed, caught everyone flatfooted.

Next, Clifford and Niles arranged a meeting between Truman and Chaim Weizmann, president of the new Zionist state.

No one from the State Dept. was invited to sit in, even though the talk ran to arms shipments and loans. Marshall was busy at the time, trying to get Israelis and the Arabs to lay down their arms in response to the U.N. cease-fire order.

So last week the whole State Dept. boiled over. Resignation talk poured in on Marshall from U. S. diplomats in the Middle East, from Department men in Washington.

With it came this information: If Truman lifts the arms embargo, at least five Arab nations will walk out of the U.N. If this isn't enough, the Arabs plan to cancel gold concessions, later to stop commercial air traffic, finally even cut off oil.

Marshall dropped all this on Truman's desk in a bundle. He walked out of the White House with instructions to cast America's vote at the U.N. for the British four-week truce plan.

That's where it all stands for the moment.

But there's open bitterness all around. Sample: Bartley Crum, pro-Zionist publisher of PM, walked out of a White House interview to tell friends that Truman is all set to fire Forrestal, Marshall, and Lovett en masse.

And around the State Dept. you hear that Marshall is ready to walk out if he gets the run-around again.

THE DRAFT AND MARSHALL PLAN are getting the backwash of this feuding over Palestine. These are the real twin pillars to America's foreign policy: men and economic bolstering of Europe.

But, with top-level Administration officials embroiled in the Middle East, the isolationists in Congress are finding it easier to stall these programs. The way Washington works, you have to nurse any controversial measure all the way through the congressional mill.

The draft still has not been acted upon by either the House or Senate. It's been tied up in Leo Allen's Rules Committee in the House to let opponents talk. It's threatened by a filibuster over race segregation in the Senate.

Machinery for foreign aid has been voted, and Paul Hoffman is at work. But the bill to appropriate the money is just starting its trip through Congress.

An added threat: Neglect of these measures

WASHINGTON OUTLOOK (Continued)

by Truman's people comes just at the time when murmurs of U. S.-Russian peace embolden the oppositionists. More congressmen are saying: Maybe we don't need the draft, after all.

As we size it up today, both the draft and the ECA money bills will get through. Hoffman will finally get his full \$5.3-billion, probably before the G.O.P. convention recess.

The draft will be voted too, but it may have some strings tied on before it gets through. And it will take longer.

ANTITRUST POLICY for the next few years hangs in the balance right now.

The trust-busters are asking themselves: How far dare we go in exploiting the Supreme Court's decision in the cement basing-point case?

On the one hand, the decision opens intoxicating vistas. The court seems to say that the Federal Trade Commission can halt any pricing arrangement—individual or concerted—which it thinks might lead in the direction of monopoly.

Already, a circuit court has applied this rule to knock out the individual use of basing points by rigid steel conduit producers.

But on the other hand, FTC well knows that, if it pushes its new powers very far, Congress can always reverse the Supreme Court; it did in the fire insurance case in 1943 and it's trying to do so now with the Bulwinkle bill on railroad rate-making.

This week, the FTC members were haled before Sen. Capehart's Interstate Commerce Subcommittee to say what they intend to do. And Lowell Mason, the dissident member of FTC, is hinting broadly to Congress that unless the lawmakers legislate away the court decision the whole structure of business pricing will be upset.

What to expect: no legislation this year certainly; there isn't time. But you can look for a Capehart investigation running through the summer and leading up to a bill next January.

BIGGEST ROADBLOCK the Republicans face in making good on their talk of final adjournment before the conventions is—as always—voting the money to run the government.

Only this week did Taber's House Appropriations Committee pass the half-way mark on approving expenditures for the fiscal year beginning July 1.

The Senate is less than a fourth of the way through the job. And Styles Bridges, chairman of the Senate Appropriations Committee, is getting madder every day at the way Taber's delay is piling all his work up at the end of the session.

Already, Taber has enough work out to show the trend: Truman's budget is not going to be cut very much.

The cut certainly will not be as much as the \$2½-billion that the G.O.P. promised. With \$822-million extra airplane money already voted, Congress may even overrun Truman's figures.

Getting agreement on dollar amounts isn't all it takes to get these appropriation bills through.

There are plenty of controversial matters to jam things up. For instance: the "rider" ousting Reclamation Commissioner Strauss; whether to let TVA start building a steam power plant.

WOMEN ARE WANTED for two more good jobs in Truman's Administration—before election day.

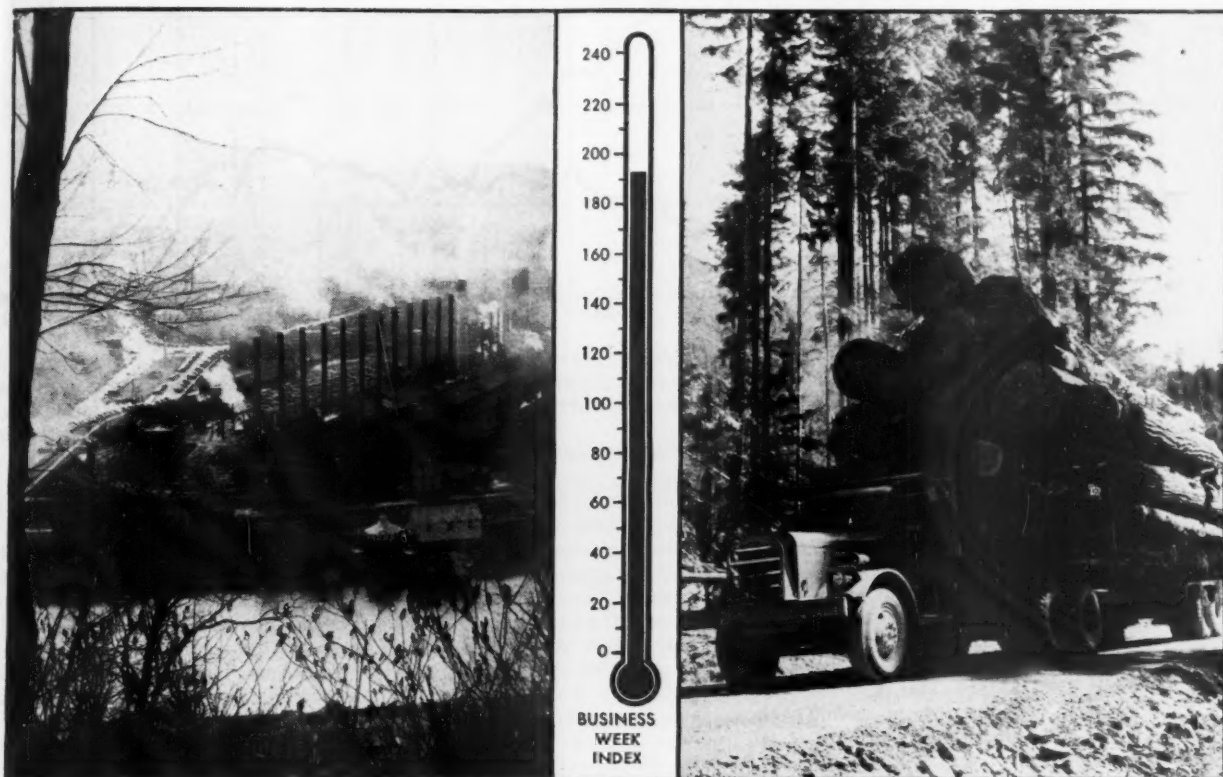
He has earmarked a diplomatic post and David Bruce's former job as Assistant Secretary of Commerce as bait for the women's vote. (Women voters outnumber men this year.)

The appointment of Frieda Hennock of New York to the Federal Communications Commission was Truman's first move in this campaign. She's the first woman to get a top federal post since Frances Perkins went on the Civil Service Commission two years ago.

Taft is prepared to risk womanly wrath by holding up Senate confirmation of the Hennock appointment, along with other jobs he is stockpiling for next year. But Truman will see that she serves at least through election, by recess appointment.

• Marriner Eccles' renunciation of the Federal Reserve Board vice-chairmanship (which Truman was reneging on anyway) doesn't mean he will quit the board. His friends expect him to stay at least until there's a Republican in the White House. . . .

• MacArthur's supporters are talking of a telegram barrage to induce Truman to order the general home before the convention. Truman wouldn't need much urging; he'd gladly give the G.O.P. another bandwagon to contend with.



From the industrial East all the way across the nation to the Pacific Coast...

U. S. Industrial Production Is Booming

Manufacturing activity has ridden out its February uncertainty. Few soft spots: textiles, shoes, machine tools, radios.

The postwar production boom has taken a new lease on life. It has done more than survive the critical period that followed the commodity price break in February (BW-Feb. 14 '48, p. 19): It has come out of the test going stronger than ever.

Most of the doubts and hesitations of a couple of months ago have evaporated now. Business activity as measured by the Business Week Index (pages 13 and 21) is edging back up toward the peacetime record that it set early this year. Unless something goes drastically wrong, the index will work its way even higher, up to new highs in the second half of 1948.

• **Close to Capacity**—A Business Week survey this week of key cities in various parts of the country shows the same picture in practically every major production center. With only a few exceptions industry is running as close to

capacity as peacetime operating conditions permit.

Many plant managers complain that shortages of materials—principally steel—still are holding them back. But in the same breath most of them admit that if they could get more materials they couldn't find the labor to step up production.

Basic industries—steel, chemicals, construction, machinery—are running wide open. Manufacturers of consumer durable goods are working at peak levels. The petroleum industry is struggling frantically to keep up with demand.

And there are no signs yet that production in general is running ahead of consumption. The study of consumer buying plans released this week by the Federal Reserve Board (page 23) shows that the big backlogs of demand are still there. Consumers complain about prices, but their plans for buying

houses, automobiles, and other durables are as big this year as they were at the start of 1947.

There are some soft spots, of course. But none of them seem important enough yet to threaten the general business boom.

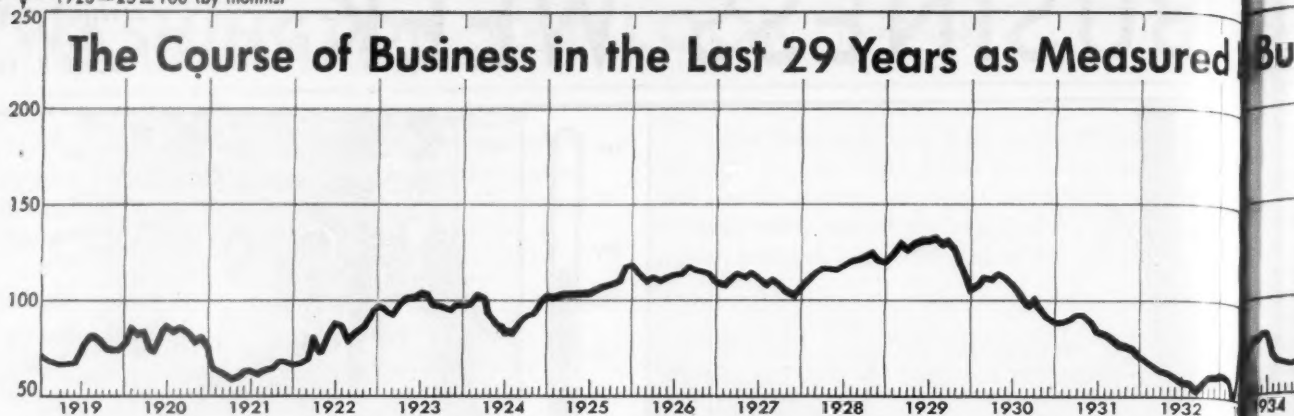
• **Textile Men Uneasy**—The textile industry, for instance, again is talking of trouble ahead. Mills that have become used to booking orders months ahead have found it hard to get business lined up for the last part of the year. Buyers have been holding back, waiting to see what would happen to sales and prices.

"It will probably turn out all right," says one New England textile manufacturer, "but I'm ready to jump either way. If the orders don't come in, I'll cut back production right away."

Worsted producers still have more orders than they can handle. But they are keeping their fingers crossed. They are boosting prices again, to keep pace with the rise in wool prices.

Manufacturers of woollens are far from happy. Four woolen mills in

1923-25 = 100 (by months)



Rhode Island closed down last week. Eight others may follow suit in the near future.

• **Shoe Trouble**—The shoe industry also is in hot water. Its troubles are mainly prices and consumer resistance to them. In Brockton, Mass., a typical New England shoe center, only 16 out of 21 factories are operating. They have 3,427 workers on their payrolls, against 5,137 employed by the shoe industry in Brockton in 1946. The average work-week in the factories that are still running is 32 hours.

• **Machine Tool Hopes**—The machine tool industry, which has been having more than its share of postwar headaches, is hoping for a pickup in the next two or three months. At the moment, business is still slow, and many employees have been laid off.

• **Doubts**—Outside of these and a few other lines—radios, for instance—manufacturers aren't worrying. And yet many of them don't feel quite comfortable even now. They think that if it had not been for European aid and the rearmament program, February's price break in commodities would have touched off a real business recession. They wonder just what would happen if these props should not prove as solid as they look.

• **Sampling**—Here is a sampling of the answers that the Business Week survey developed in some of the country's main production centers:

Boston. The shoe industry's troubles have kicked back on production in the Boston area. Otherwise, things look good. New England textile mills are uneasy about the future, but they all say that the factor which holds them down is not lack of orders but lack of manpower to step up production.

Providence. Closing of woolen mills highlights the textile industry's difficulties; employment in cotton textile mills is down, too. Otherwise, business is going strong.

Hartford. Connecticut Valley brass mills have cut employment about 5% since the beginning of the year. Supply has pretty well caught up with demand,

but the industry hopes for a basketful of defense orders. Watch and clock output is stable now, after a sharp drop late last year.

Buffalo. Most plants in the area are going at capacity rates. Steel mills are back to full-scale operations after the coal strike. Plastics plants and the abrasives and chemical industry at Niagara Falls are going full steam.

Philadelphia. There are some signs that manufacturing activity is tapering off—but only a little. Radio manufacturers laid off a number of employees some weeks ago, but a great percentage of them have been rehired to work on television production.

Atlanta. Some textile producers are pulling long faces, but output still is high.

Detroit. The all-important automobile industry still is operating at only 75% of capacity, or thereabouts. The reason: steel shortages, especially sheets. But this rate of production is about as high as any level reached since the end of the war. Manufacturers are scraping the bottom of the barrel for manpower and any loosening in steel supply would mean a critical labor pinch. Heavy-truck producers are in a buyers' market now and are running at only 50% of capacity.

Cleveland. A Chamber of Commerce survey shows that total man-hours worked in April were 5% less than they were a year earlier. Most plants are busy, but all are not running at capacity. Makers of fractional horsepower electric motors are having trouble; they ran into a buyers' market some months ago. Some manufacturers of vacuum cleaners have found the going tough; one or two have solved their problem by switching to washing machines, ironers, and other appliances. Chemical companies are still going full blast.

Akron. There has been a definite pickup in manufacturing activity in the last 30 days. Production of the rubber companies is still somewhat under 1947's record pace, but is much higher than many looked for. Machine shops—next to rubber the biggest industry in

Akron—are going at or near capacity.

Indianapolis. Production is down a shade—but only a shade. Capital goods factories are going "something terrific." Several companies are finishing big additions to their plants and will step up production shortly. Drug output at Eli Lilly & Co. is zooming. In addition to expanding its own works, Lilly has bought a government-owned plant formerly used for making aircraft propellers and is using it to make penicillin and streptomycin.

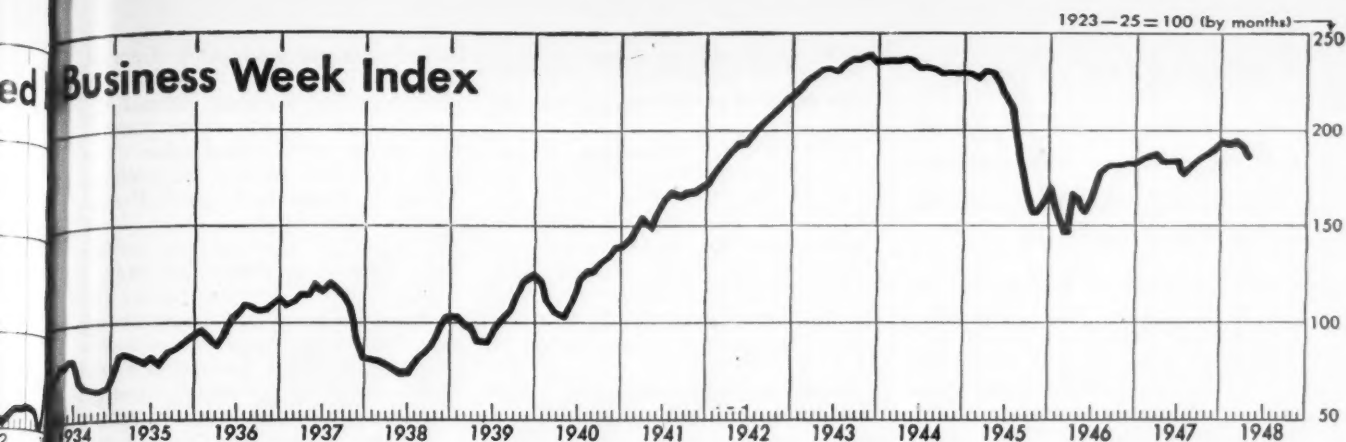
Chicago. The backbone of Chicago production consists of steel, petroleum refining, agricultural implements, chemicals, communications equipment, machinery and parts, electrical appliances. All are going strong. Industries that are below last year's peaks include candy, radios, lamps, luggage, and some standard purpose metal-working machinery.

St. Louis. A study by the Missouri State Employment Service reports: (1) Manufacturing activity is at a new peacetime high; but (2) employers are more conservative in their outlook than they were this time last year. Shoe plants still are producing close to capacity. One furniture manufacturer reports production down about one-third. A manufacturer of electrical appliances says business is up 50% over last year, "but I'm scared; I don't believe merchandise is moving off the retailers' shelves."

San Francisco. Large and medium-size plants are doing fine. Smaller plants, especially those with weak sales departments, are tapering off. Production generally is better than a year ago.

Los Angeles. Industries at or near capacity include petroleum, apparel, food processing. Metal-working lines are spotty. Aviation, motion pictures, and automotive assembly are operating well below capacity. In aviation, the trouble is lack of orders. The industry is hoping for an upturn as a result of the new armament program. Automotive assembly is held down by material shortages. Los Angeles County is expected to assemble cars at the rate of 650,000 annually by late this year; that would make it second only to Detroit.

Business Week Index



A Better Business Index

First postwar revision of Business Week's Index of Business Activity introduces up-to-date seasonal corrections and reconverts half way to a peace basis (defense output is still important).

This week Business Week is introducing the first postwar revision of its Index of Business Activity (above, and page 13). The revised figures, which go back to the beginning of 1947, present a more accurate picture of the week-to-week movement of business. But they have not been changed much. For instance, last week's index on the old basis was 191.4; on the new basis it is 192.9. Differences in some weeks are greater than that, but none are extreme.

• **No Basic Change**—In short, the revision makes no break with the basic philosophy and method of construction of the index. It is not the product of a whim or statistical change. The reason for making the revision now: Our postwar economy has shaken down. Many changes took place during and since the war. A year ago it was still not possible to tell which were temporary upsets and which were permanent shifts. Now, for the first time, it is possible to discriminate.

The revision consists of three parts:

PARTIAL RECONVERSION from a wartime to a peacetime basis.

UP-TO-DATE SEASONAL corrections for three index components.

ADJUSTMENTS of several minor index factors.

• **Minor Steps**—The last two of these steps were routine. Seasonal factors for electric power and the two carloadings series were computed 10 years ago; they are now out of date. Similar changes were made often before the war; in 1939 and 1940, for instance, the automobile seasonal had to be shifted because the changeover to new models came earlier in the year.

The other routine step calls for correction of minor factors. For instance,

carloadings figures are adjusted by government data on the number of tons carried per car. During the war these statistics were suspended and Business Week had to estimate them; now the government has resumed their computation. Again, Engineering News-Record has revised its construction-cost index, which is used in our index to deflate the dollar value of construction awards.

• **Reconversion**—The third step in the revision is something more than routine; it's a half-way reconversion to peacetime conditions. Before the war, two of the index components were auto assemblies and construction activity; each had a weight of 10%. But in the defense-production period before the United States entered the war, priorities and allocations siphoned more and more materials out of civilian production. So automobiles and construction no longer reflected the true course of general business.

For this reason, the index was revised a month before Pearl Harbor (BW—Nov. 1 '41, p. 14). Auto assemblies were dropped; the weight assigned to construction was halved. At that time, the Federal Reserve Board had just developed monthly indexes of output in the machinery and transportation-equipment industries. A weekly series based on these monthly indexes was substituted for autos and construction in Business Week's Index, with a weight of 15%. Thus, the index was able to reflect accurately the increasing production of planes, ships, guns, and other weapons and war materials.

When peace came this component also reflected accurately the reconversion from planes to autos, from tanks to freight cars. But gradually autos and construction once more became accu-

rate indicators of weekly movements of heavy-goods production.

• **Only Half Way**—With this revision, the index returns half way from wartime to peacetime composition in this field. Auto assemblies return, but with a weight of 5% instead of the prewar 10%; the weight given to construction goes up from 5% to 7½%; the component based on the Reserve Board's monthly series remains, but with a weight of 7½% instead of 15%.

There is a good reason for not returning all the way to a peacetime basis: the renewed importance of defense output. By retaining the "defense component," the index retains its franchise to reflect any major peacetime-war shifts in production that may develop.

• **New Figures**—Here are the revised weekly index figures:

1947		1947	
Jan. 4	186.6	Sept. 27	190.1
11	186.4	Oct. 4	188.4
18	186.9	11	189.2
25	188.3	18	188.6
Feb. 1	189.7	25	190.1
8	185.0	Nov. 1	190.2
15	187.3	8	189.8
22	189.6	15	189.9
Mar. 1	190.5	22	193.8
8	188.9	29	193.6
15	190.6	Dec. 6	195.0
22	190.9	13	197.0
29	189.2	20	196.3
Apr. 5	182.9	27	190.7
12	183.0		
19	188.4	1948	
26	189.3	Jan. 3	191.9
May 3	187.9	10	195.7
10	184.4	17	196.1
17	184.2	24	195.8
24	185.8	31	191.7
31	185.4	Feb. 7	192.3
June 7	186.4	14	191.3
14	186.8	21	197.4
21	186.3	28	198.4
28	184.2	Mar. 6	197.0
July 5	172.8	13	198.5
12	175.0	20	193.2
19	184.1	27	188.9
26	184.1	Apr. 3	184.8
Aug. 2	185.7	10	183.1
9	183.9	17	186.0
16	184.4	24	191.1
23	184.7	May 1	193.4
30	186.3	8	191.2
Sept. 6	188.7	15	190.9
13	186.4	22	192.9
20	187.7	29	193.6

Toolmaker Plight

Ban on exports to Russia catches machine tool builders with millions in Soviet orders. Government may help.

The machine tool builders of the U. S. this week found themselves caught in the web of international politics. And about the only thing they could count on to get them out whole was the federal government.

• **Dilemma**—It all began back in the early postwar days when the U. S. was on fairly good terms with Russia. At that time, 46 machine tool builders wrote from \$20-million to \$30-million worth of Soviet orders. Amtorg, the Russian trading company, took the re-

sponsibility of getting export licenses. Generally the manufacturers got a 30% down payment at the time orders were placed.

Since then, the international atmosphere has changed a lot. Among other things, the government has blocked the shipment of machine tools to Russia. Result: Now the Amtorg agents are demanding the return of their down payments from the manufacturers. The manufacturers, in turn, have turned them down pending a decision by the U. S. government.

• **Loss**—The tool builders argue that they could not return the money without taking a tremendous loss. Many of the 1,500 machines ordered have already been shipped to Amtorg; nearly all the rest are in various stages of assembly.

The builders were the first to realize that although the machines are designed for peacetime use, they could easily

be turned to war production. Even so, they can't see much point in the U. S. blockading the machines because the Russians can take the entire machine tool output of Czechoslovakia. And they can still buy some of the machines denied them here in England, France, Sweden, Switzerland.

• **Dodge**—U. S. machine tool builders also remember an order that came a year ago from an Argentine dealer. Its specifications called for Russian wording and a Russian system of measurements. Therefore, argue the builders, if Russia really needs U. S. machines, it can get them easily through dealers or agents.

Meanwhile, there's a good chance that the stranded U. S. toolmakers will be helped by the government. There's talk in Washington of setting up a hardship fund for U. S. manufacturers who suffer financial loss as a result of U. S. foreign economic policy.



PROTEST MEETINGS, like this one of filling station men, and . . .

BEER IS THE WORKINGMAN'S DRINK!

DO YOUR PART AT ONCE TO HELP KILL THE PROPOSED 5¢ TAX ON BEER

Write or Wire Your Senator and Representative Today—

Add these to note AGAINST the 5¢ Beer Tax (Hays 801 101)

HOW YOUR PROTEST TO YOUR SENATOR AND REPRESENTATIVE, CARE OF STATE CAPITOL BUILDING, BOSTON, MASS.,

HERE'S WHY THE BEER TAX WILL INJURE YOU

NEW ORLEANS BREWERS' ASSOCIATION

Louisiana's Lost Battle Against Tax Boosts

Everywhere that Louisiana businessmen gathered this week a familiar name was on their tongues as a topic for worrisome talk: Long.

• **The Long and Short of It**—It all started when Earl Long, brother of the late Huey Long, took office as governor.

Last week, over the protests of businessmen and labor unions, the Long-dominated legislature passed bills that will: (1) boost the state gasoline tax to 9½¢ a gal.; (2) slap a 5¢-per-bottle tax on beer; (3) double "severance" taxes on nearly all natural resources (gas, oil, coal) taken out of the state's soil; (4) double the state's sales tax (up from 1% to 2%), at the same time cutting the New Orleans sales tax in half (from 2% to 1%).

The legislature also started the ball rolling on an important constitutional amendment. Its gist: The New Orleans' active, nonpolitical Board of Port Commissioners ("dock board") would once again become appointive by the governor.

• **Undoing the Done**—It was this last bill which most disturbed New Orleans' prosperity-riding world traders. They remembered how the port had languished in Huey Long's day. ("Old Huey made the port of Houston," said one.) They remembered how it had taken a constitutional amendment in 1940 to make the port self-sustaining and free from political footballing.

Although all businessmen (except a few who had backed Long financially)

were worried, some tried to look on the bright side. Some thought that Huey's politically astute son, Russell, who had campaigned for his uncle and is now his executive adviser, might have a good effect.

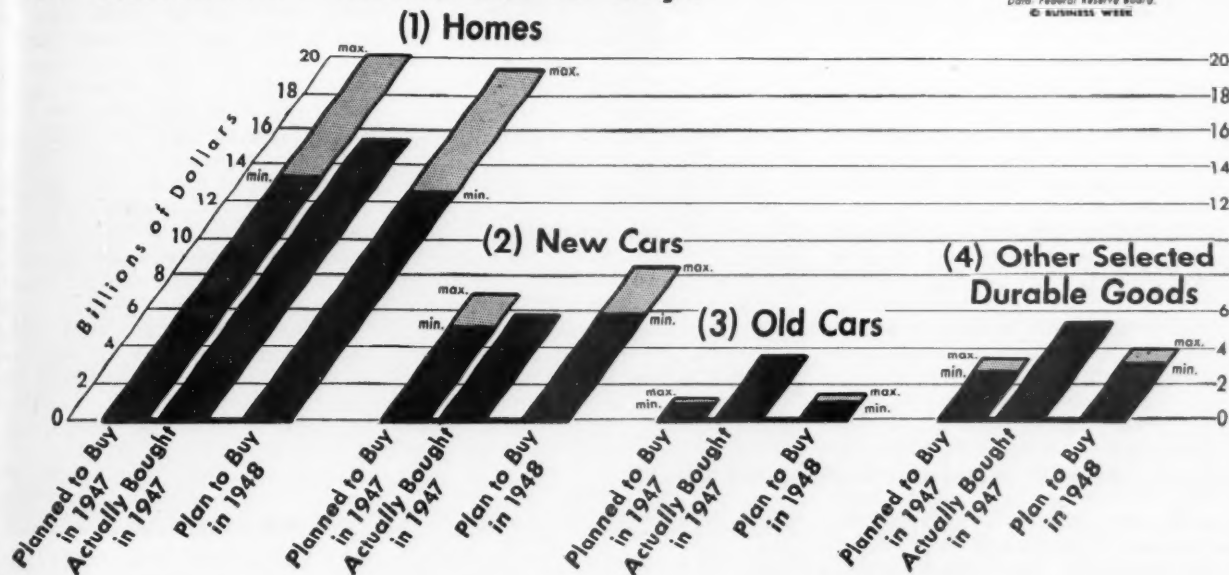
Another business leader thought that some of the administration's bills might be just window dressing: "After all, Earl's got to try to live up to his campaign promises [old-age pensions, soldiers' bonuses] some way."

• **Hope?**—But no matter how strongly they felt, businessmen joined in one hope: that their efforts to put New Orleans in its enviable international trade spot and to bring new industries into the city (BW-Jun.28'47,p38) would not be lost in one swoop.

FULL-PAGE ADS were weapons in . . .

Consumers' Intentions to Buy:

Data: Federal Reserve Board.
© BUSINESS WEEK



The Backlog of Demand Is Still With Us

Federal Reserve survey shows that consumer purchases in 1948 will continue at high level. And buyers have the money.

If consumers make good their intentions, 1948 is going to be even bigger than 1947 in purchases of houses, automobiles, and other durable goods. Two years of postwar production have made no dent you can see in the backlog of demand.

Dollarwise, this means:

- There is a \$5.8-billion to \$8.4-billion market for new automobiles—if manufacturers can turn out cars fast enough to take advantage of it.

- Planned expenditures on housing total \$12.6-billion to \$19.3-billion this year.

- Demand for a selected list of other durables—furniture, refrigerators, washers, and radios—runs \$3.1-billion to \$4.0-billion or better.

- **Cash on Hand**—What's more, consumers have the cash to back up their demand. True, their financial position weakened somewhat during 1947. But at the end of the year, two-thirds of the country's spending units still had a backlog of liquid assets to draw on. And these holdings were fairly well distributed through the various income groups.

These are some of the main conclusions that stand out from the first instalment of the Federal Reserve Board's third annual Survey of Consumer Finances, released this week. The survey is a companion piece to the two previous studies sponsored by the Reserve Board in 1946 and 1947. Taken together, the three give a picture of the way actual purchases and plans to pur-

chase have varied during the postwar period. And the latest figures give producers of consumer durables a rough measure of the markets they can expect in 1948.

• **Interviews**—The survey was handled by Dr. Rensis Likert's Survey Research Center at the University of Michigan, which also ran the two other studies (BW—Jun. 14 '47, p15). Conclusions are

based on some 3,500 interviews with a carefully selected sample of the nation's spending units. (The survey defines a spending unit as a group of people living under one roof and pooling their incomes for major expenses.)

Interviewing began early in January this year and ran through the first week in March. The February break in commodities came while the survey was under way, and the analysts later broke down the results on a before-and-after basis. They found that the tumble in commodities made many people look

How Consumers See Economic Outlook

Most consumers still are optimistic about the future. Here are the opinions they gave the Federal

Reserve Board on their financial status and what they believe lies in the future:

	Percentage Distribution of All Spending Units		
	1948	1947	1946
Financial situation now compared with a year earlier:			
Better off.....	29%	31%	20%
Same.....	28	30	42
Worse off.....	39	34	31
Uncertain.....	2	2	2
Not ascertained.....	2	3	5
Own incomes:			
Incomes will be larger a year from now.....	27	23	25
Incomes will be about the same.....	38	42	34
Incomes will be smaller.....	10	14	23
Uncertain.....	23	19	13
Not ascertained.....	2	2	5
General economic outlook:			
Good times ahead.....	47	55	35
Uncertain, no change.....	19	21	23
Bad times ahead.....	26	22	36
Not ascertained.....	8	2	6

for lower retail prices—particularly in foods—but had no effect on their buying plans.

• **Bright Picture**—By and large, the picture that the latest survey paints is a bright one for business.

In automobiles, planned purchases for 1948 are greater than either plans for 1947 or actual purchases in 1947 (chart, page 23).

In housing, consumers are planning somewhat more modestly than at the start of 1947. But the range of their 1947 plans (\$12.6-billion to \$19.3-billion) leaves plenty of room to top the actual 1947 purchases, which came to \$15.5-billion.

In other consumer durables, plans are running larger than last year but below actual purchases in 1947. This doesn't necessarily mean that sales in these lines are going to fall off: Apparently, many families do not plan their purchases of appliances far in advance.

• **Cautions**—In using these figures a businessman will have to take several "ifs" into account:

For one thing, consumers can change their minds. Most people were banking on good times in 1948 when they listed their buying intentions (table, page 23). A sudden drop in incomes or a rise in unemployment might make them scale down their plans.

For another thing, consumers won't be able to carry out all their plans unless the goods are available. And in some lines it looks as though produc-

tion won't be enough to meet the demand.

• **Supply Still Lags**—Somewhere between 3.1-million and 4.5-million spending units hope to buy new cars this year, for instance. That is considerably more than the automakers are turning out at the present rate.

Approximately a million spending units want to buy houses in 1948. Estimated starts on new dwellings this year are only 950,000, and part of those will be earmarked for rental.

There also is some evidence that the heavy purchases are putting a strain on consumers' pocketbooks. Total indebtedness is increasing. The rate of saving is down. And a substantial proportion of the country's spending units are spending more than their incomes, at least temporarily.

• **Savings and Credit**—But even with these qualifications, the survey makes the future look bright—not only for producers of hard goods but for business in general. Here are some of its findings on consumer incomes, savings, and asset holdings:

(1) Almost half of all spending units had higher incomes in 1947 than in 1946. But the rate of net savings by consumers declined in 1947. This was the result of heavy dissaving (expenditures in excess of income) by about one-fourth of the spending units, and a decline in the rate of saving by other groups.

(2) Total holdings of personal liquid

assets continued to increase in 1947. (The survey defines liquid assets as bank deposits and government bonds. There is no way of counting currency hoards because most people won't admit to a strange interviewer that they have cash in the house.) The rate of increase in liquid assets was considerably smaller in 1947 than it was in 1946. And for the first time since the end of the war there was a decline in the number of spending units holding liquid assets.

(3) The use of credit in purchasing durable goods increased in 1947. About 9-million spending units used installment credit last year to buy cars and other durables. This is about double the number using credit in 1946. About four-fifths of those purchasing houses in 1947 used mortgage credit. Financing plans of prospective buyers in 1948 indicate that installment sales will increase more this year.

Mobilization Guidebook For U. S. Industry

If your plant is one that might be involved in the mobilization program, you will probably want to read a new book, just out this week. Its title: "A Guide for Joint Industry-Military Procurement Planning." Its publisher: the Munitions Board. Its object: to start industry checking on itself to determine what it can accomplish in the way of war materials—if and when.

• **A Lot of Plants**—Thomas J. Hargrave, board chairman, says that there are about 82,000 industrial plants in the country of interest to the military "for mobilization planning purposes." The board has already determined that 11,000 have facilities that should be allocated to military claimants for future sources of supply; 8,000 have been tentatively allocated. The military, meanwhile, has asked for about 12,500 plants.

• **Guidepost**—The new book is directed at the remaining 70,000-odd plants—the ones that haven't yet been fully surveyed, about which the military knows little or nothing.

It sets down a program for mobilization planning that will work in any plant. Some of the things it contains:

A checklist to measure a plant's preparedness for mobilization; the current program for allocation of industrial capacity to the armed services; lists of strategic and critical materials and multipurpose components in short supply during the last war; directories of procurement planning offices of the three military departments, and the military offices now working on procurement.

The guide can be obtained from the regional procurement planning offices or from the Government Printing Office, Washington 25, D. C. Price: 25¢.



Locomotive-Baggage Car for Short Hauls

This combination diesel-electric locomotive and baggage car is undergoing tests on the Milwaukee Road. It was especially designed to pull small trains (four cars) on branch line short hauls—where many rail-

roads lose money on their passenger operations because of heavy steam equipment. The unit is powered by two 1,000-hp. General Motor engines and was fabricated in the car shops of the Milwaukee.



CHATTING at the American Iron & Steel Institute meeting are Bethlehem Steel's chairman, Eugene Grace (left), and U. S. Steel's president, Benjamin Fairless

Steelmen Face Price Problem

Most worry about recent cuts more than anything else, feel that a return to old levels at least is necessary. Also hope that Congress will override Supreme Court's basing-point decision.

Every user of steel would have sensed one thing at last week's meeting of the American Iron & Steel Institute: The producers today are more worried about prices than about anything else.

There wasn't a lot of talk about prices from the speakers' platform. But prices were constantly on the minds and frequently on the tips of the tongues of the audience of 1,200 steelmen.

• **The Gist**—This is the gist of some of the informal talks at the New York meeting:

(1) The recent price cuts by U. S. Steel (BW—May 1 '48, p19) were followed reluctantly by some of the companies. They would welcome a return to the old levels—at the very least.

(2) Any rise in that which would add a tiny fraction of a cent to a pound of steel would be considered reason enough for a price hike.

(3) First cost-booster is expected to be in the price of coal. Any settlement with the miners this month or next is expected to cost the steel industry plenty.

(4) An agreement with the steel union on pension and insurance provisions for workers would be another inducement to jack up steel prices.

(5) There is no need to do anything right away about the basing-point pricing system because of the Supreme Court decision on the cement case

(BW—May 1 '48, p24). The steelmen's hope: The next session of Congress will make the use of basing points legal.

• **"Wise Judgment"**—Walter S. Tower, A.I.S.I. president, told the assembly that the industry had used "wise judgment in refusing to continue the ratchet process of up wages, up prices, to the detriment of general welfare."

But he indicated that his view of the outlook—which is generally in tune with that of the top level of the industry—is not too rosy. He made it plain that what the steel industry had done would have no lasting effect unless supported by similar action in other important industries.

Steelmen wondered out loud about the effects of higher wage settlements in the auto industry. No one was ready to say definitely that steel would or would not pay any attention to those events.

Some of those who had cut prices on certain steel products shortly after the dramatic action of U. S. Steel were obviously unhappy about it now. They felt that it was a good idea to try to stop inflation. They weren't at all sure though that the steel price cuts were justified. So they would like to put prices back where they were in a jiffy if they could find a reason.

Steel company leaders looked on the cement case decision in the Supreme Court with disgust. If basing-point pricing

is doomed in steel, they believe, it will be tough on both makers and users of steel.

They repeated some of their old arguments: If steel products have to be sold f.o.b. mill, with the same mill net on identical sales, each mill would have its market limited by its delivery costs. Distant buyers of steel products would be penalized in direct proportion to their distance from the nearest mill. And local monopolies would be created by elimination of competition from a zone around each steel mill.

They brought up somewhat newer angles, too: (1) With more basing points added and with more products using those basing points, the question becomes more and more academic as time goes on; (2) since all companies are not pricing steel products at the same levels these days, users have different price quotations to take into account, as well as basing points.

So legislation to override the Supreme Court on its decision is what the steel industry wants. It believes that Congress should specifically make steel's pricing methods invulnerable to court attack.

MULE(S) VS. TRAIN

The Illinois Central R.R. has a train on its line called the "Delta Express," which is a local. It runs between Memphis and Greenville, Miss., stopping at every likely spot along the way. In fact, the "Express" is so local that people call it "Old Reluctant."

Recently residents of the area began saying that a man on a mule could outrun the Delta Express. When this crack got to the ears of Hodding Carter, Pulitzer-prizewinning Greenville editor, he immediately promoted a race.

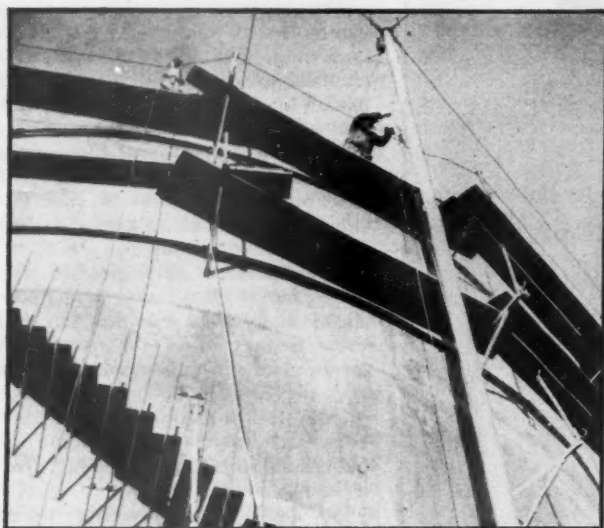
The race began when the train pulled out of Cleveland, Miss. At Shaw, passengers saw the townsfolk welcoming a rider and a mule. At Leland, the rider of a mule was being handed the keys to the city when Old Reluctant wheezed to a stop. And as the train pulled into Greenville (38 mi. and 1 hr. and 16 min. from Cleveland), a crowd of 4,000 greeted a mule and rider as a band played: "Nobody Knows the Trouble I. C."

The I. C.'s only consolation was that they weren't all the same mule. Imitation mail sacks were carried out of each town by a mule. Then an auto would carry them to the next town ahead of the train, put them on another mule.

But even making the I. C. the butt of a good-natured joke wouldn't help solve the I. C.'s dilemma.

Railroad officials asked last week: "How can they get better train and mail service when they want the train to stop at everyone's station?"

PETROLEUM



Oil companies are building new storage tanks . . .



. . . Some industries are using barges for emergency storage . . .



. . . And a few homeowners are putting in bigger tanks, but the petroleum industry is still . . .

Stretching the Tight Oil Supply

Oil companies are going to use allocation programs again to give customers an even break. But this winter will still be tough.

The 1948-49 heating season got under way this week. But some industries and a few homeowners had jumped the gun: They were already busily adding extra fuel storage space against impending oil shortages (pictures).

For it is obvious that the race between oil supply and demand this summer and next winter is once more going to be a close one. And it's equally obvious that it can't be winner-take-all—or a lot of people are going to get hurt. Whether they like it or not, the oil

companies will again have to allocate their products to assure fair distribution.

• **Falling in Line**—Individual companies realized this months ago. As the new heating season approached, they had to decide whether allocation was necessary and, if so, on what basis. Company after company has faced this tough issue—and made the decision. Esso Standard Oil is expected to announce its allocation program soon for the new heating season. Sun Oil Co. put its gasoline allocation plan for 1948 into effect some

time ago. Shell Oil Co. is continuing on an allocation basis.

True enough, experts figure that about 8% more crude oil will be available for the 1948-1949 season than during the one just past. But at least 2% of this extra supply will have to be used to build up storage stocks. As a result, the oil companies expect to be able to handle an increase of only 4% to 5% in demand. And the latest estimates (BW—May 15 '48, p.84) indicate that demand will certainly go well over that extra 4% or 5%.

• **Conservation Drive**—That's why the companies are trying to stretch their supplies as far as possible. Best way



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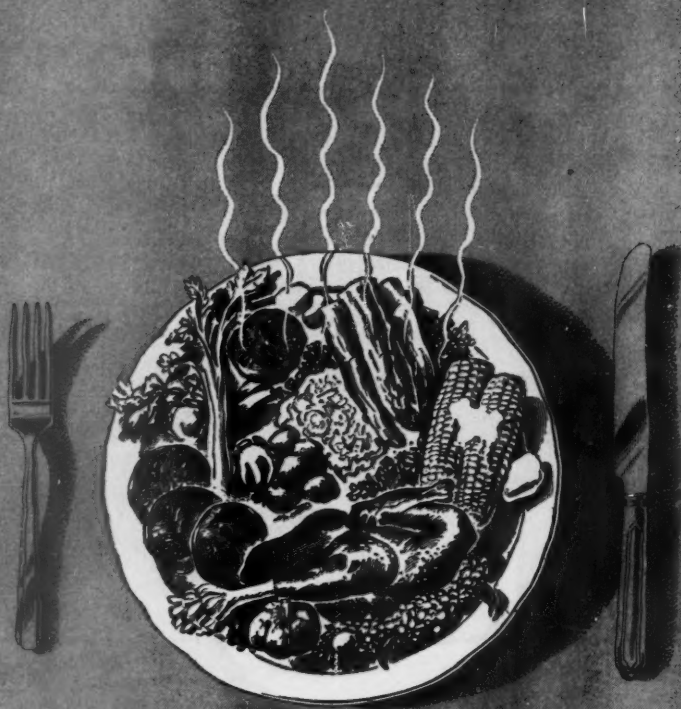
The ever-expanding list of users includes the United States Government, the Army, the Navy and the Air Force. American Airlines uses Sinclair lubricating oils exclusively. 150 U. S. railroads, thousands of industrial plants, millions of motorists and farmers—truckers, bus operators, steamship lines, construction firms and contractors—depend on Sinclair lubricants.

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portrait of an attitude of mind

The typical American attitude of mind has been described as "alert," "aggressive," "forward-looking." Science links this optimism to the food we eat—to the economy of abundance that enabled the United States to win a war while arming and feeding her allies, at the same time raising the income and consumption of her population to an all-time high.

To spread democratic ideas to the world, we must first provide food. And that's just what we are doing, with varieties of grain developed in America, fertilizer, and agricultural

savvy to make crops grow taller and more nourishing.

Key to this monumental job is finding a way to restore nitrogen to worn-out soil. The need for this vital chemical is acute both at home and abroad.

One CSC plant is now working at full capacity to produce ammonia for agriculture and industry. Ammonia, an important source of nitrogen for fertilizer, is one of more than 200 chemicals for the farmer, doctor, manufacturer and motorist produced by Commercial Solvents Corporation.



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to do this is to eliminate wasteful use of fuel oil and gasoline. So the industry is spreading the gospel of conservation.

It takes one cue from surveys which show that most of the nation's oil burners need overhauling. According to some estimates, more efficient operation would save 10% to 25% of individual burner consumption. A number of oil companies are, therefore, urging their domestic customers—through letters and advertising—to have their burners checked. Some, like Esso Standard, will look over any burner for nothing. This usually leads to overhaul.

• **Industry-Wide**—Much more crude oil is used as gasoline by passenger cars, trucks, tractors, and buses, than as heating oil. Oil companies are urging drivers to use their vehicles with discretion.

The conservation drive is being funneled to the public through the whole oil marketing system. The companies are getting their story out: (1) directly, where they sell fuel oil to the consumer or own their own service stations; (2) indirectly, through distributors—who usually pattern their conservation programs on the supplier.

• **Storage Space Needed**—When demand gets close to supply, the oil industry has an added problem to cope with: it sometimes finds it impossible to keep the right amount of the right product on hand when needed. So the industry is building up its own storage capacity and trying to get homeowners to do likewise. Industrial users of fuel oil generally have large storage facilities already, but some are putting in additional capacity this year.

Gulf Oil Corp. offers a good example of what the oil industry is doing in this line. Picture (top left, page 26) shows construction work on a new tank at the company's Montello (Pa.) terminal plant. All told, Gulf will have built new storage tanks for an extra 159-million gal. of oil throughout the eastern states by the end of 1948.

• **Users, Too**—Pittsburgh Plate Glass Co. is one industrial user that doesn't intend to get caught short on fuel. It recently installed standby oil-burning equipment at its Creighton (Pa.) glass plant. To store fuel oil, it had Dravo Corp. build a 195-foot welded steel barge which is moored in the Alleghany River near the plant (top right picture, page 26).

The oil industry has a problem with homeowners: It is hard to persuade them to put in bigger tanks. For one thing, it's expensive. (The 1,000-gal. tank in the picture on page 26 cost its Scarsdale [N. Y.] owner \$400 installed and it can cost a lot more.) And local building regulations sometimes limit the size of such tanks. Thus, some companies haven't tried to push bigger tanks.

• **Big Tanks Help**—Oil men say that if distribution is to be really effective,

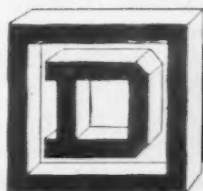


**IF HE
COLLECTED SAMPLES
as he made his rounds**

A sample from every industry served by Square D Field Engineers would make quite a load, indeed. For these men serve as liaison between Square D and every segment of industrial America. Their full-time job is working with industries of every kind and size—helping find that **“better way to do it.”**

Through these Field Engineers, located in more than 50 offices in the United States, Canada and Mexico, Square D does its three-fold job: Designs and builds electrical distribution and control equipment in pace with present needs—provides sound counsel in the selection of the right equipment for any given application—anticipates trends and new methods and speeds their development.

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Weighing only 7¼ lbs., without fittings, this basin of "Lucite" acrylic resin combines colorful, gleaming beauty with dependable durability. Tests show that the basin withstands hot water — has excellent dimensional stability, is resilient and shatter-resistant.

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home fuel tanks should hold about 35% of a year's supply. Since the average burner uses about 1,600 gal. a year, the average tank should hold 500 gal. But about 3-million of the nation's 3.5-million burner units have only 275 gal. tanks.

A few distributors give owners of big tanks a discount on their oil, since transportation costs are less when tanks aren't filled so often. This looks like the most effective way to encourage installation of large tanks.

• **Newcomers Frozen Out**—Most companies allocate their oil products among customers on an historical basis. And very few are taking on any new customers. (A Business Week survey turned up only one company that plans to take on any new customers—a few domestic heating accounts.)

Exceptions to this general policy are usually due to the differences in oil-field reserves and the refining capacity of the companies.

They can also be due to other factors. The oil companies don't always hold rigidly to the historical basis. For instance, they try to allow as much as they can to a customer that comes to them from some other supplier. They also make an exception to newcomers when they have set up a retail outlet likely to do a good business. Other complications occur because: (1) Demands for various oil products vary



NEW GULF OIL CHAIRMAN

The top command at Gulf Oil Corp. shifted last week as J. F. Drake took over as chairman of the board. He succeeds W. L. Mellon, who retired after 45 years as active head of the company. Drake has been with Mellon family interests for nearly 30 years, president of Gulf since 1931. Sidney A. Swensrud, who came to Gulf in 1947 from Standard Oil Co. (Indiana), steps up from executive vice-president to president.

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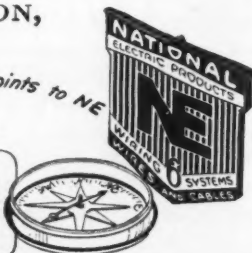
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from year to year; (2) some old customers go out of business or shrink in size.

• **Stanolind**—Standard Oil of Indiana two months ago announced a rather nebulous allocation "policy" for its customers. Boiled down, customers are ranked this way, in order of allocation: (1) military (all present estimates of demand assume that military needs won't rise for the next 12 months); (2) farmers (particularly important in this company's territory); (3) industry and transportation, schools, hospitals, public buildings (all these should have "their fair share of available supplies").

Indiana Standard declared that the limit had been reached on supplies of heating oil for homes and nonessential industry.

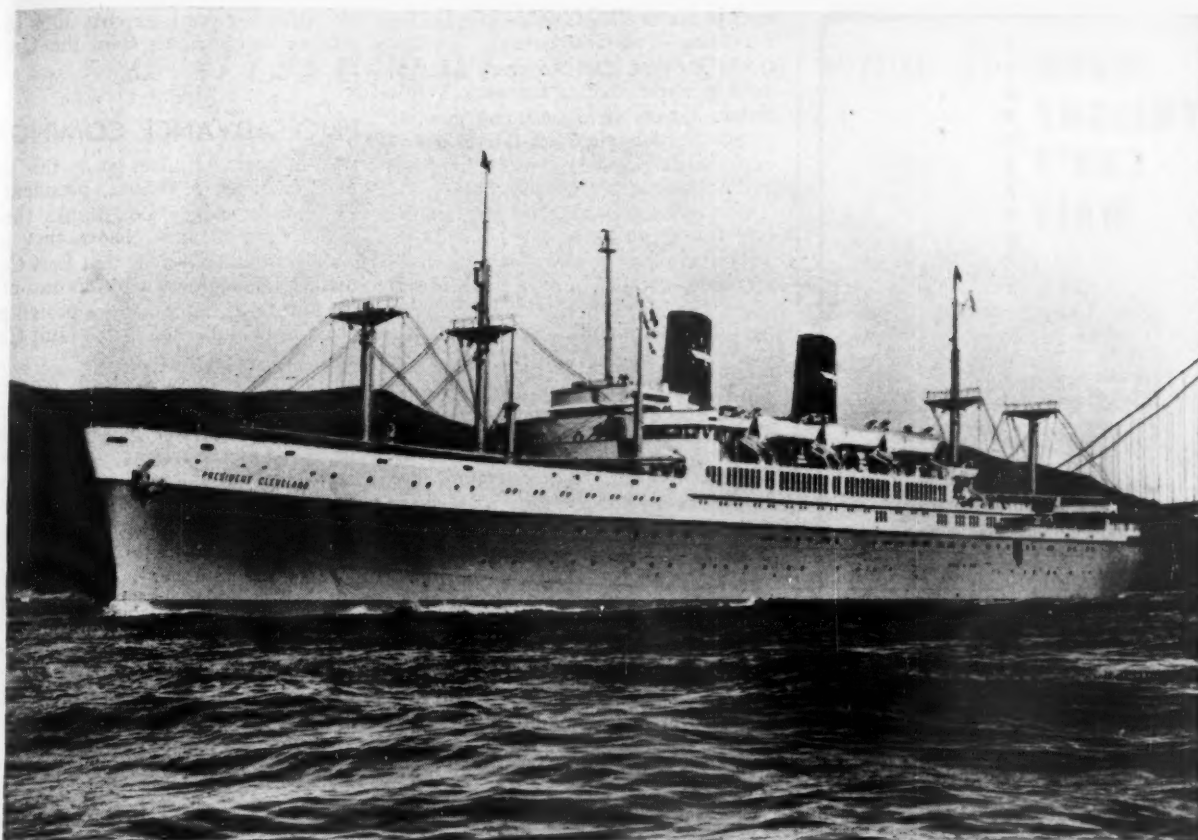
• **Gasoline Supply**—The oil companies are more or less cheerful about the gasoline situation. Each company's degree of optimism depends on its crude production and refining capacity. But no company predicts anything more serious than "spot shortages" during this summer's vacation season.

On May 22, overall gasoline stocks were up about 10% above stocks the year before. In the Midwest—where the gas pinch is expected to be worst (BW-Mar.27'48,p9)—gasoline stocks were up about 7% from the year before. On the East Coast gasoline stocks were up last



TANKER GETS PENNANT

The first ship in the U. S. tanker fleet to win the naval reserve flag for merchant vessels is the Esso Chattanooga. Rear-Adm. Oliver M. Read (left) awards the pennant to the tanker's master, Capt. Thomas B. Christenson. The pennant is awarded to merchant marine vessels suitable for service as naval auxiliaries—and whose masters and not less than half the other licensed officers are members of the naval reserve.



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With a throaty blast echoing back from the hills of Golden Gate, the brand new "President Cleveland" stands out to the Orient, followed by her twin sister, the "President Wilson" . . . pacemakers in modern travel efficiency and luxury.

Maiden voyages for these great ships—but an old familiar story for the Fiberglas Insulations that are aboard, contributing to comfort, safety and efficiency. Shipbuilding and Fiberglas were wedded long ago, when naval architects were presented with a new material that was both non-combustible and much lighter in weight than other insulations.

Fiberglas Insulations meet the rigid specifications of the U. S. Navy, and have been installed in fighting ships for the past 15 years.

The high thermal insulating efficiency of Fiberglas results from the countless tiny air spaces enclosed in a lightweight blanket of long, fine fibers of glass—fibers that won't burn, are odorless, chemically stable, non-corrosive, won't rot or disintegrate.

This basic material is further processed into various forms for insulating hulls, living quarters, bulkheads, ducts and refrigerated spaces—and for deadening sound in communication centers and engine rooms. Fiberglas Insulations are resilient and do not settle or pack down with the ship's vibration in pounding seas.

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**WABASH
RAILROAD**

week by about 20% from the year before.

• **Trading**—The difference in gasoline stocks between the two areas reflected itself in market trading last week. While eastern buyers were swapping gasoline to get heating oil, midwestern buyers were bidding gasoline prices up, but finding it easy to get heating oil.

If vacation trips hit their peak around July 4, as seems likely (BW—May 29 '48, p19), there may be temporary gas shortages then at many points in the Midwest and along the East Coast. Already last week in Richmond, Va., out-of-state tourists were being limited.

CANADIAN PRODUCTION

Canada, which imports over 90% of its oil, is looking hopefully to its young Leduc oil field in Alberta, for Canada is second only to the U. S. in per capita consumption of oil products.

The Leduc field, operated by Imperial Oil, Ltd., an affiliate of Standard Oil Co. (N. J.), was opened a little more than a year ago. It has produced as much as 5,000 bbl. a day; output is expected to rise rapidly as new wells are drilled.

The field has done much to reverse a decline in Alberta's oil production. But even Alberta, the source of most Canadian oil (it produced about 15,000

bbl. daily last year), imports 20% of its refinery requirements from the United States.

PRICE ADVANCE COMING?

Will crude oil prices go up this summer? Kenneth S. Adams, president of Phillips Petroleum Co., thinks there's better than an even chance they will.

Adams said last week that East Coast marketers and foreign buyers are offering 10¢ to 35¢ a bbl. above posted purchase prices for crude in the Gulf Coast and East Texas fields.

Right now these premium payments affect only about 2% of the oil produced there. Reason: Most oil is either produced by the refining and marketing companies, or is going to them under contracts at current posted prices.

Eventually, Adams believes, all refiners and marketers who buy crude will have to meet the premiums—if they continue to be offered. He suggests that some major companies might do this without increasing their posted prices—since the situation is localized.

Most oil companies are opposed to raising the price of crude oil now. This week some of the big ones said they are ignoring the premiums in the Gulf Coast and East Texas fields.



Runaway Canadian Well Goes Unstemmed

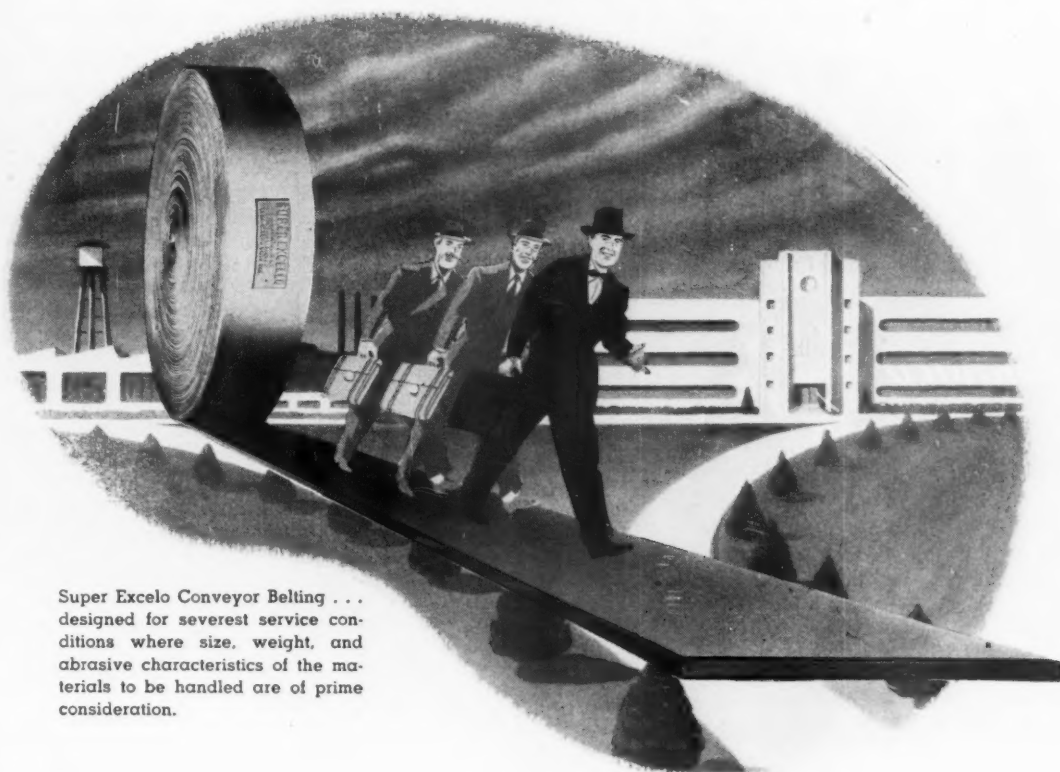
This is one oil well—near Edmonton, Alberta—that is not boosting the petroleum supply of North America. More than 10,000 bbl. of crude (and 75-million cu. ft. of gas) are escaping from it every day to form this seething lake of oil.

The loss was caused by a drilling accident. As the drilling bit passed through a porous geological formation near the top of the oil dome, it opened up the sand. Under

terrific underground pressure, oil was forced to the surface through crevices and previously drilled shot holes.

Oil experts from the U. S. and Canada have been unable to find a way to stem the flow. Bulldozers are trying to keep the lake from spreading by throwing up dikes. Meanwhile, workers are trying to drain the oil away in an orderly manner before some accident sets the lake on fire.

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Crude Output Up

Rate of pumping is now topping the most optimistic guesses. Yet not all states are producing their quotas.

In December of last year, the Economics Advisory Committee of the Interstate Oil Compact Commission (made up of 15 top oil economists) figured that in 1948 daily average output of U.S. crude would have to reach 5,385,000 bbl. Some doubt was expressed by observers at that time that the industry would be able to sustain that rate.

• **Over the Mark**—According to the latest reports, the industry is doing even better now than the economists hoped. Last week, the American Petroleum Institute released tabulations showing that for the four weeks ended May 22nd, average daily production rate has reached 5,422,000 bbl. For the same period last year, the average daily production rate was 5,024,850 bbl. Of course, that high rate would have to be maintained all through the year in order to meet the goal set by the commission.

A closer look at the latest figures shows that not all the states are producing up to the state allowables (set by commissions in charge of crude oil production in each state). Most of the major producing states east of California have such state allowables. California quotas are set by the Conservation Committee of California oil producers.

• **Some Above Quotas**—For the week ended May 22nd, Kansas and Oklahoma averaged 721,700 bbl. a day; this was an excess of 21,700 bbl. over the quota. California, the only other major producer that exceeded quotas, produced at a rate of 948,500, an excess of 51,700 bbl. daily over the figure set by the conservation committee.

On the other hand, other major producing states were under the quotas. Examples: Texas, Louisiana, Arkansas and New Mexico operated at a rate of 3,095,000 bbl. daily, some 104,214 bbl. a day less than allowable.

From the figures, and despite the fact that some states aren't producing up to the allowable quotas, crude pumping is at a record high. Heavy pumping and all-out refining have lifted stocks to healthy levels.

• **Better Than 1947**—As of May 22nd, stocks stood at the following levels compared with the same date last year (figures in thousands of bbl. of 42-gal. each):

	1948	1947
Finished and unfinished gasoline...	106,934	97,062
Kerosene	14,885	11,420
Gas oil and distillate fuel oil...	37,333	33,487
Residual fuel oil	54,452	44,652

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1947
97,000
11,400
33,480
44,650

1948



Oil Under Water

Derricks sprouting in Gulf are sign of industry's race to find new sources. Job is costly, but oilmen think it will pay off.

For 100 miles along the Gulf Coast of Louisiana and Texas a new sight heaves into view of air travelers: oil derricks sprouting out of blue waters. For under this part of the Gulf of Mexico lies the shallow, gradually sloping continental shelf—the U.S. oil industry's new frontier.

Back of the industry's drive to spend vast sums plumbing for these under-water riches lies the ever-growing demand of an oil-hungry nation (page 26). As far as the deep, open sea is concerned, the drive is just getting under way. But last week a well being drilled in 50 ft. of water—Humble Oil & Refining Co.'s Grand Isle No. 1—passed through oil-bearing salt rock at 8,000 ft. That, says Humble, is a good sign.

• **Early Interest**—As geologists began to ferret out new oil fields in the marshy bayous of Louisiana and Texas 25 years ago, they thought: This same sort of surface, in the form of a continental shelf, extends gradually out into the Gulf for nearly 100 miles. Why, then, shouldn't there be oil under the water, too? Using the same scientific methods that they use on land (BW—May 15 '48, p90), they explored the offshore area. And they found sure indications of oil-bearing strata.

Geologists now guess that 4-billion to 5-billion bbl. of crude oil lie under the water within a strip extending 31 mi. out from the coast line. They base their guess on the density and production of

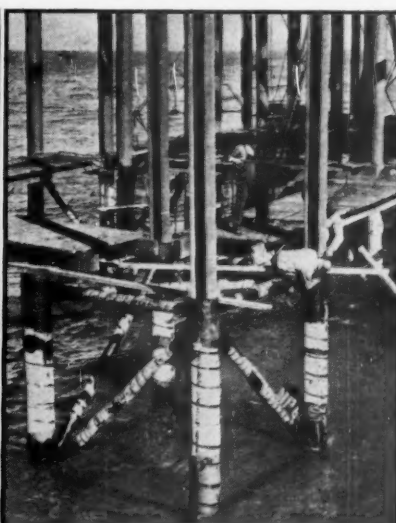
DEEP-SEA DRILLING RIGS—Like platform of Humble Oil's Grand Isle No. 1—are costly to build and maintain. This one is 8 mi. from shore, has quarters for 54 men



UNDERWATER CHART is examined by geologists to locate spots for setting up rigs over areas where oil deposits might be found

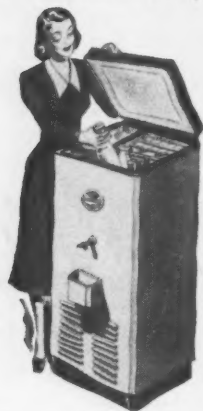


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You're not getting full value for your investment unless the water cooler you buy offers the advantages of:

1 ADVANCED ENGINEERING

Sunroc offers exclusives such as its triple-purpose Super Cooler: a water cooler with generous ice-cube and refrigerated storage capacity. And the static condenser—used now to give greater efficiency; quieter, more economical and dependable operation.

2 SPECIALIZATION

Sunroc specializes in water coolers. Each of its 17 modern models is tailored to some specific business, industrial or institutional need, styled to harmonize with its environment.

3 HIGH VOLUME

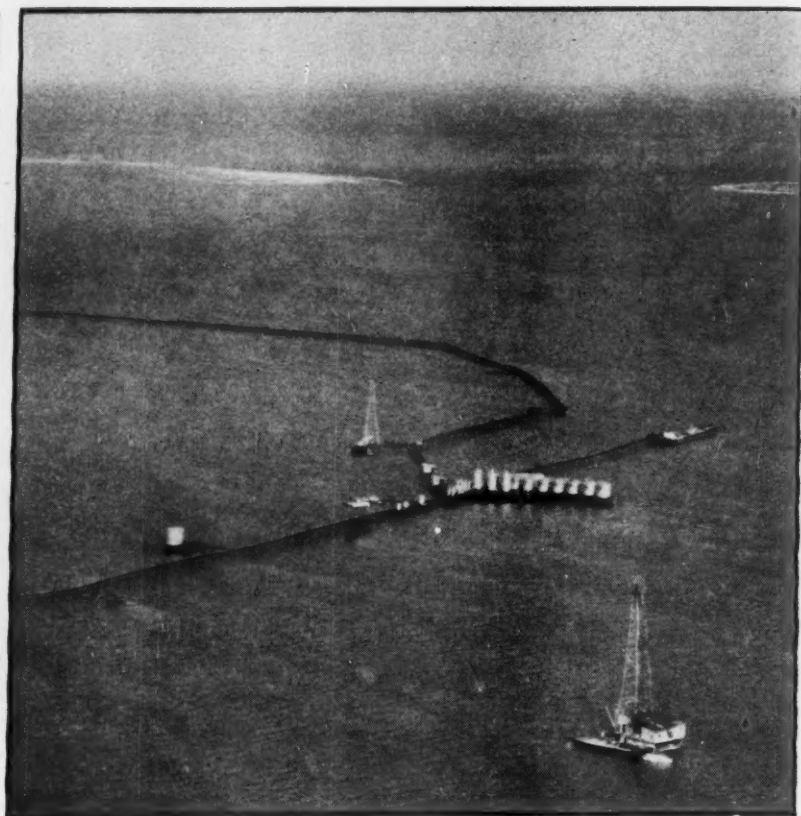
Sheer quality has made Sunroc the nation's biggest independent manufacturer of water coolers. Mass production efficiency enables Sunroc to undersell the industry as much as 20 percent below competitive models.

For further details on the Sunroc line, Sunroc superiority, and Sunroc values, write Dept. BW-6, Sunroc Refrigeration Co., Glen Riddle, Pa.

America's most complete line of water coolers, \$199.95 up, F.O.B. Glen Riddle, Pa.



"SUNROC SERVES THE WORLD... a cool drink of water"



ADDITIONAL FACILITIES for a producing underwater field include over-water pipelines which lead from wells to a central cluster of tanks, where crude oil is picked up by . . .

oil derricks on an equal area inland from the coast—where 245 rigs are located, or one about every 100 sq. miles. Taking in a wider area—in deeper water—the potential reserves are estimated in even greater amounts.

• **Leases and Operations**—In 1938 an oil field (appropriately named "Creole") was opened up a mile off the Louisiana coast, in 8 ft. of water. This was the first open-water field in the Gulf; since then it has produced 2.8-million bbl. of oil.

In August, 1945, Louisiana offered leases on a total of 124,000 acres under the Gulf. By this week the state had leased some 2-million acres of land under open water. Some 27 oil companies and independent operators paid \$18-million for them. Texas has leased out a smaller number of acres for some \$7.2-million. Leases in both states are on a fee-plus-royalty basis.

• **Cost of Building**—Although the rigs used in offshore drilling are like those used on land, the complex operation of drilling underwater is far more costly. In the first place, there is the cost of putting up the platform for the derrick. Humble, subsidiary of Standard Oil Co. (N. J.), says its rig for Grand Isle No. 1 cost \$1.2-million. Magnolia Petroleum Co., a subsidiary of Socony Vacuum, has spent \$9-million in offshore operations.

Thus, the day of the independent



. . . BARGES or tankers, and shipped up canals and rivers to central inland refineries

wildcatter, who sank a well on a few thousand cash and limitless guts is passing. It takes a well-established company, willing to spend vast sums on exploration work, to sink so much in an offshore well.

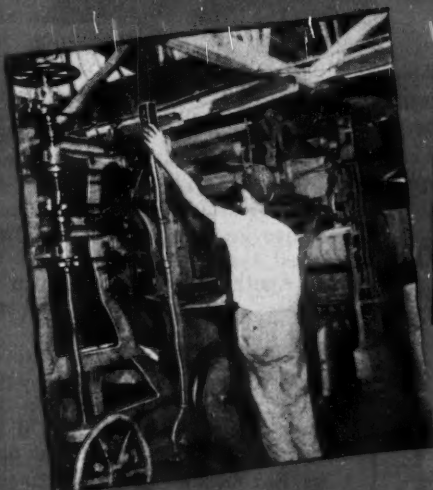
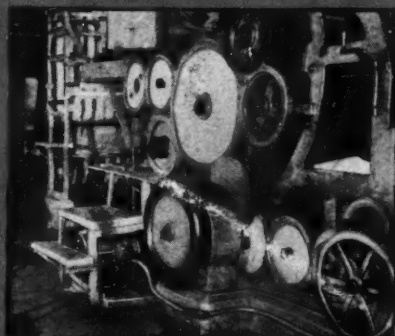
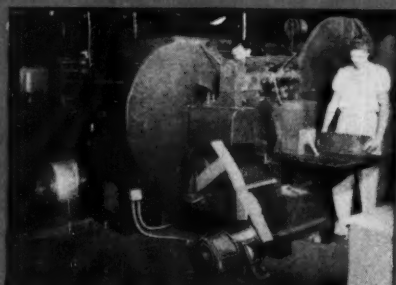
• **Effort and Results**—So far, the only producing well in the Gulf outside the three-mile limit was sunk by an independent producer, Kerr-McGee Oil In-

FASTER *with* PRINTING

Adjustable Speeds from A-c. Circuits



*Conveniently packaged, space-saving V*S Drives are available from 1 to 200 hp. Two or more motors may be operated simultaneously from a single Control Unit.*



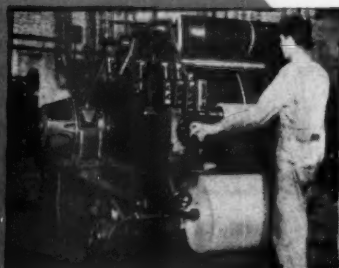
The amazing adaptability of Reliance V*S — the *All-electric, Adjustable-speed Drive which operates from A-c. Circuits*—accounts for its successful employment on a steadily increasing number and variety of machines in the graphic arts industry. Operation of a V*S-equipped machine is simple and easily learned. Control is all-electric, manually or automatically directed, right at the machine or from remote stations. Flexibility of operation introduced the V*S way invariably increases production and lowers cost—a fact we can prove in your plant. Contact the Reliance Representative in your locality or write for new Bulletin 311 which will give you some further information about Reliance V*S Drive.

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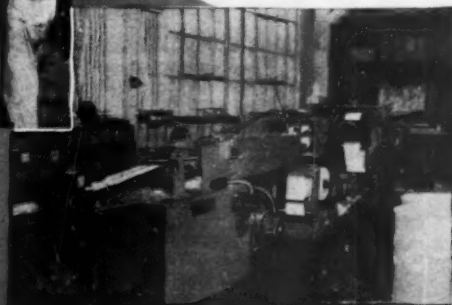
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**A-C RELIANCE
DC MOTORS**

"MOTOR-DRIVE IS MORE THAN POWER"



*• A few of the more specialized printing machine applications of Reliance V*S Drives are illustrated here.*





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WAUKEGAN, ILLINOIS • BRANCHES IN PRINCIPAL CITIES
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U-S-S CYCLONE FENCE



Cyclone Fence, Waukegan, Ill., DEPT. 468

We'll send you our free, 32-page book on fence. It's full of facts, specifications, illustrations. Shows 14 types of fence. Before you choose any fence for your property, get the facts about Cyclone.

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City..... State.....

Interested in fencing: ☐ Industrial; ☐ School; ☐ Playground; ☐ Residence. Approximately..... feet.



UNITED STATES STEEL

dustries, Inc. Located in 17 ft. of water, 11 mi. from land, the Kerr-McGee rig hit oil in November, 1947, after drilling to only a few thousand feet.

Other companies haven't been so lucky. One of Magnolia's offshore rigs is still plugging away at more than 12,000 ft. Humble is prepared to go all the way to 15,000 ft. with Grand Isle No. 1.

• **Marine Production Problems**—Grand Isle No. 1 is the first operating platform in deep, open water. (There are other open-water rigs close to shore, and other deep-water rigs located within the protective arm of offshore islands.)

Humble's first step was to call in oceanologists and weather experts. They forecast what ocean conditions and storms could be expected in the area. Then engineers went to work designing a rig to fit the bill. As completed, the rig and platform is built to withstand winds of hurricane force and waves up to 35 ft.

The platform, 206 ft. by 110 ft., is 8 mi. from shore. It is a completely self-contained unit, where workers eat and sleep. The rig keeps in constant communication with Humble's shore facilities by radiotelephone, and a small boat stands by 24 hours a day in case of emergency. Working schedules are arranged so that the crew of 54 men spends five days on the rig, then several ashore.

Despite the cost of such operations, Humble figures they are worthwhile. The company is already building other rigs for drilling in other locations on its leased area.

• **The Legal Question**—Actually, as Humble and other operating producers know, one of their biggest problems is not physical; it's legal. This is the complicated question of who owns the tidelands.

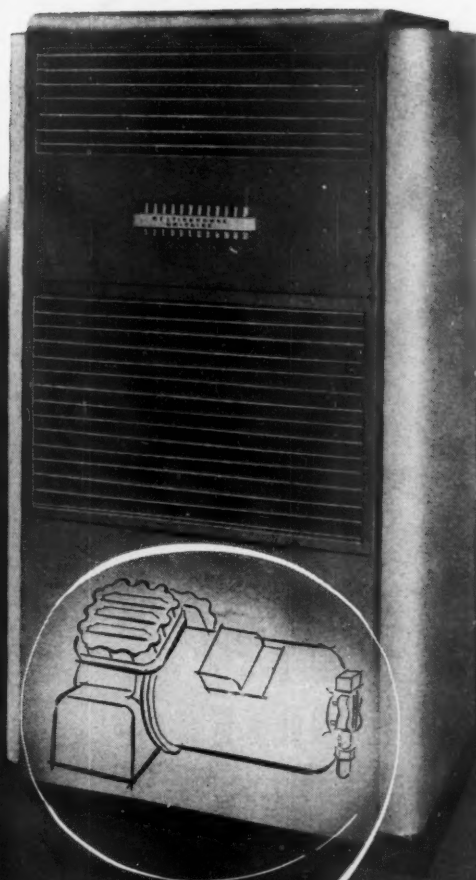
Last year the U. S. Supreme Court decided that the federal government had "paramount rights in and power over" the tidelands (BW—Jun. 28 '47, p. 5). The coastal states concerned, joined by the oil companies, have bitterly attacked this decision. They say past court decisions affirmed the states' historic ownership of the land.

Several bills have been introduced in Congress as a result of the high-court verdict. One, drafted by Interior Secretary Krug, would establish a system of exchange leases, and a sliding royalty scale, if the federal government took over. Another, pushed by oilmen and the states, would give the coastal states official title to the tidelands.

• **Determined**—But whatever the outcome in Congress, oilmen have not let the legal problems of ownership deter them. Sometimes they talk as if they were ready to call off tideland operations. But most of them hope to go on looking for new fields—out under the water—no matter who owns the land.

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MAY
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SEE
A

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FOR A LIFETIME OF SERVICE

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flection of years of leadership in perfecting this superior kind of compressor. And remember, *only Westinghouse* makes *all* the important components of an air conditioning unit. Westinghouse air conditioning units cost no more to buy, cost less to operate. So the best way to protect your air conditioning investment is to ask for Westinghouse. Call your nearest Westinghouse air conditioning distributor or write to: Westinghouse Electric Corporation, Sturtevant Division, 51 Readville Avenue, Hyde Park, Boston 36, Massachusetts.

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Whatever your industrial wire requirements, Keystone can normally supply them.



KEYSTONE STEEL & WIRE COMPANY
PEORIA 7, ILLINOIS

Oil Burners Low

	1948		1947
	March	February	March
Production ..	27,372	34,736	99,638
Shipments ..	18,848	24,816	96,793
Stocks	68,690	60,286	14,793
New orders			
(net)	8,407	9,727	11,934
Unfilled orders	124,190	134,631	1,077,904

Fuel-oil shortage cuts deep into output, factory orders, shipments; inventories jump. Industry fights tide.

The oil-burner industry is staring at a grim set of Dept. of Commerce figures (above). They spell out how hard the fuel-oil shortage has hit the business.

The Commerce statistics for March, issued last week end on the basis of reports from 155 oil-burner makers, show:

PRODUCTION of burners was only 27% of March, 1947, output.

FACTORY SHIPMENTS were down to 19% of year-ago volume.

NEW ORDERS (less cancellations) were about 70% of the March, 1947, total in units.

UNFILLED ORDERS at the end of March, 1948, were a scant 12% of the figure for a year earlier.

STOCKS at the end of the month were more than 4½ times those of the close of March, 1947.

• **Installations Down**—Dealers are glum, too. Installations are off. What makes that especially hard to take is that the current order-famine follows two years of lush sales. Installations in 1946 were at a record high of 492,593; and even this was eclipsed in 1947, when installations hit 888,000.

Then in January of this year, the fuel-oil crisis began to pinch. Installations in that month were off 36% from a year earlier. Since then the trend has been progressively down. April installations were down 59% from the April, 1947, level.

This retail slump hit the manufacturers quickly, because dealers entered 1948 with inventories estimated at 80,000 burners. That's nearly as many as they sold in the first four months of this year.

• **Heating Stove Picture**—When you turn to domestic heating stoves (which don't use anywhere near so much fuel as furnace burners), the picture is still not bright—though it isn't quite so gloomy.

March, 1948, production was 93% of March, 1947, output. Factory shipments were 71% of a year ago. But fac-

This Man Can't Stop Burglary



Your payroll may be stolen



Your stock may be appropriated



Your clerks may be held up



Your cash may be pilfered



Your safe may be robbed



Your premises may be damaged



BUT he can stop burglary Losses!

NO matter how strong a lock is, there is always someone who can break it . . . no matter how high a fence is . . . someone can climb over it. But even with the current high rate of crime, your company can protect itself against loss due to burglary or theft. Your

Insurance Agent knows how to give your company maximum coverage against such losses with a minimum of premium outlay. There is a USF&G agent in your community who will be glad to see you, without obligation, at your convenience. Consult him today!

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Fidelity & Guaranty Insurance Corp., Baltimore 3, Md.
Fidelity Insurance Co. of Canada, Toronto

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Agent or Broker



as you would your
Doctor or Lawyer."



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Bauer & Black Industrial Adhesive Tapes are *built for specific uses* in industry.

Engineers in hundreds of U. S. industries realize savings of 5 to 85% by using Bauer & Black Industrial Adhesive Tapes instead of conventional materials in applications like these:

• *Tying, bundling and repair; waterproofing; identification; finger protection; sound deadening; moisture vapor barrier; insulation; oil, solvent and abrasion resistance; sealing and packaging.*

• Whatever your tape needs, we probably have the tape you want. If necessary and to our mutual advantage, we'll make the tape you need for your job. Write Dept. 7-6 for free Catalog.

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PRESSURE SENSITIVE

Production Short Cuts to Reduce Costs • Research to Speed and Improve Methods

tory inventories were three times as high, and unfilled orders were only about half as large as at the end of March, 1947.

• **Whose Fault?**—The oil-burner people blame the petroleum industry for a lot of their trouble. This is the way they see it: In the East, hardest hit by fuel-oil shortages last winter, refiners made little effort to hold down gasoline production last summer in order to build up fuel-oil reserves. So, when winter arrived, fuel oil had to bear the full brunt of the shortage.

In the Middle West, things were easier. Oil companies there began allocating gasoline early in the summer (BW—Jun. 28 '47, p24). More fuel oil was made and stored. Result: a better winter than the East had.

Oil companies, for their part, blame most of the East's troubles on the severe winter. This boosted consumption, hampered distribution. Oil men point out that U. S. fuel oil consumption in 1947 was 23% greater than in 1946, 73% over 1941. That's a big increase to try to keep up with. And shortages of materials, notably steel, hurt their expansion just as it hurt many other industries.

That's all water over the dam, now. What the oil-burner industry wants is more lenient treatment in the months ahead. Oil economists are predicting that 5% to 8% more petroleum products will be available this year than last. The oil-burner industry thinks the economists are too conservative.

• **What to Do**—The industry, through its trade association, Oil-Heat Institute of America, is trying to stem the heavy tide by working more closely with the petroleum people. At its annual meeting in Chicago (BW—Apr. 17 '48, p54) it set up a committee for this purpose. Object: to get fuel oil where it will do the most good.

The first steps in this direction have now been taken. O.-H. I. will get from 30 oil-burner manufacturers (who make 75% or more of all oil burners) monthly reports on sales of burners by states. These state totals will also go to the American Petroleum Institute's marketing committee. That way, it is hoped, burners will be sold in areas where there'll be fuel oil—but only up to the expected supply of oil. And some spot shortages may be prevented.

Oil-burner people hold one potent trump in the game of who's going to get the oil. Their dealers, they point out, will have to make replacement sales and some new sales to stay in business. These dealers service the 3.5-million power-driven burners and 5.5-million space heaters now in use. If dealers go out of business, if manufacturers shut down, the oil industry itself would face the job of servicing and supplying parts for this equipment.

*Balance
in
the Air*



means money in the pocket for

Celanese Corporation

or neighborhood dress shop...



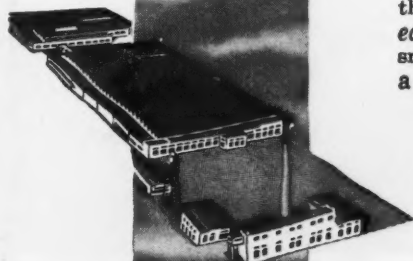
or you. Why should you—like the manufacturer of famous Celanese yarn and other business people who want the *best* in air conditioning—expect the greatest comfort, lowest-cost operation, longest life from Worthington equipment?

One simple answer: *balance in the air.* Balanced temperature and humidity. Balanced system—all the interrelated machinery made by the same *one* manufacturer to the same standards.* Balance in *each* piece of equipment—for smoother, quieter running during a long, trouble-free life.

50 years of air conditioning experience . . . the most *complete* line of air conditioning and refrigeration machinery . . . and an enviable network of capable air conditioning distributors — explain why *there's more worth in Worthington.*

Call your local Worthington distributor listed in Classified Telephone Book. Worthington Pump and Machinery Corporation, Air Conditioning and Refrigeration Division, Harrison, N. J.

*Worthington makes more of the vital innards — compressors, condensers, engines, turbines, pumps—than any other one manufacturer.



WORTHINGTON



AIR CONDITIONING AND REFRIGERATION

PRODUCTION

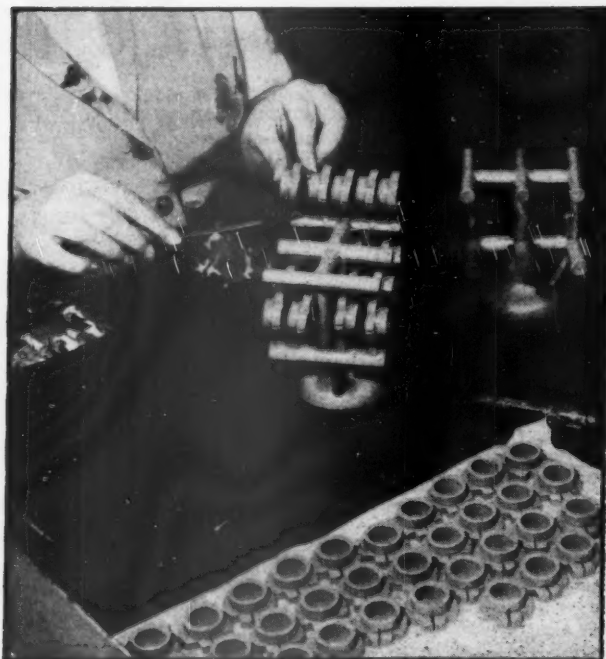
Mass-Producing Complex Castings



1 Precision casting begins with a master pattern of the part. The gas-turbine blade pattern being machined here will be used to form the metal dies (or molds) into which . . .



2 Melted wax is injected to form a wax replica of the desired part. Wax is under controlled pressure and temperature. When it hardens, dies are opened and . . .



3 Wax replicas are mounted on "sprues," which will form the channels through which metal flows. This wax model of the casting as it will come from the mold is then given a . . .



4 Primary "investment" coat. It is a mixture of fine silica and sodium silicate that will form the smooth inner surface of the final mold after wax is melted out. Then . . .



5 Coarser silica is motor-sifted on the wet dip coat. Next step is . . .



6 Assembly of group of patterns into a stainless-steel "flask," into which . . .



7 Remainder of plaster-like investment mixture is poured. It hardens, and . . .



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Write for Bulletin 4706. It tells more about the time and money saving features of H-P-M metal working hydraulic presses.

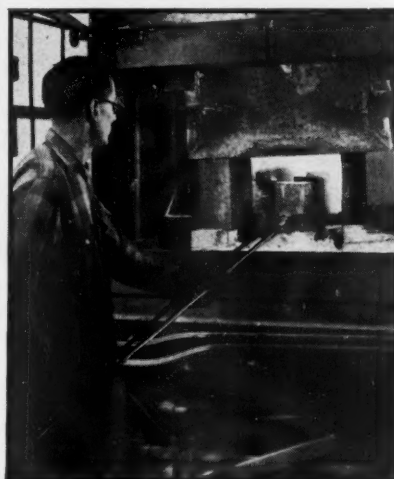


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Self-Contained* **Metal Working Presses**

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8 Flasks go to steam table, where heat melts out most of the wax. Then...



9 Flasks are heated to pouring temperature in furnace. Wax is gone, cavities remain. Meanwhile...



10 Metal is melted in induction furnace, proper alloys are added, and temperature is checked. Then...

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DDT, toxaphene and many other miracle insecticides of today need to be mixed with oil-type solvents to make them most effective. Then these concentrates must be diluted with water.

But "oil and water don't mix," or so the old saying goes. The Atlas research chemist knows how to make oil and water mix by adding just the right amount of just the right Atlas surface active agent.

The result is better dispersion. A liquid that would ordinarily form a globular drop springs into a covering film when the right surface active agent is added. Such a film carries the insecticide under the hard shell or through the hairy or waxy surface that forms the insect's defense. It enables the solution to completely cover waxy surfaces of plants. Through better dispersion, the insecticide goes farther and produces a higher kill.

Better dispersion, brought about by Atlas surface active agents, improves the quality of many products that are made by mixing oil and water. Atlas emulsifiers, Atlas Spans and Tweens, are the means of "fixing" oils in cosmetic creams and lotions—the accomplishment of the blend of "unfriendly" elements in floor polish, cutting oils, water-thinned paints, polishes—and in countless other products. From solving such problems, Atlas has accumulated a stockpile of ideas—ideas that can make products more effective, more salable. Your particular problem will receive prompt attention.



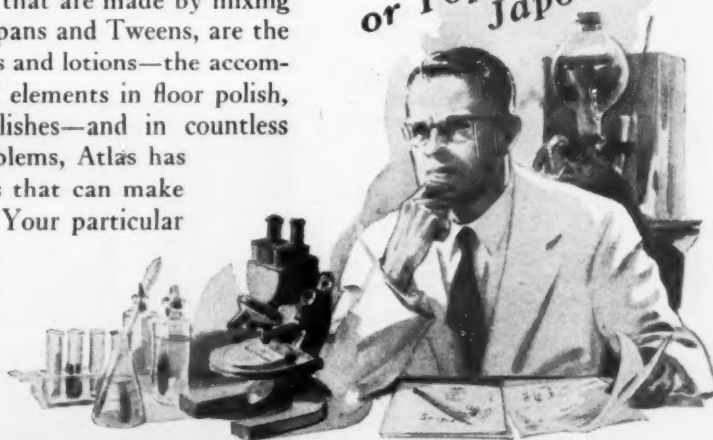
*Anthonomus
Grandis?...*



*or Porthetria
Dispar?...*



*or Popillia
Japonica?*



Span and Tween: Reg. U. S. Pat. Off.



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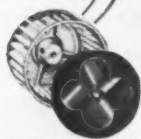
In any type of cooling or ventilating equipment, you are certain of quality and performance when Torrington Vairified® Air Impellers are used to circulate the air. Their design and engineering are based on fifteen years of research; they are in full accord with the most advanced principles of aerodynamics. Maximum air delivery with quietness is assured.

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Sales Engineers in all principal cities



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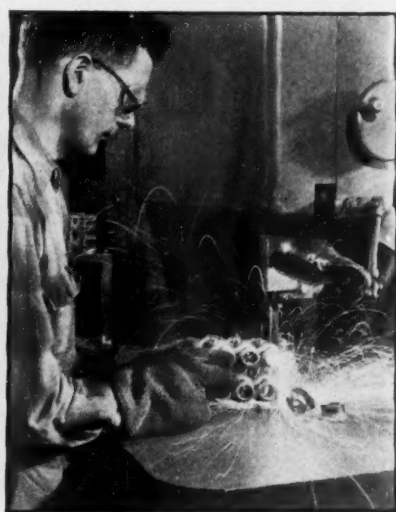
TORRINGTON
CONNECTICUT



11 Metal is poured into flasks set on a rotating table; it fills the cavities left in the plaster-like investment after the wax has been melted out. Castings cool and . . .



12 Air hammers knock castings out of investment. Castings are separated by . . .



13 Band-saw cutting. Sprues go back for re-melting. Castings are now ready for . . .



14 Final inspection, where surface conditions and dimensions are carefully checked against blueprints. Rough spots may require slight grinding. Plant operates under . . .

Adaptability to tough jobs
in mines and quarries makes

FALK

the mining
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Battery of ball mills in copper mine using Falk Gears. These gears have been in use over 20 years—requiring no replacement.

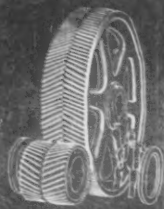
Just as modern American living depends largely upon the continuous and efficient operation of the vast mining and quarry industries, so have these basic industries come to lean heavily upon Falk products for the dependable and economical transmission of geared and coupled power. In mines and quarries everywhere, as in practically every other branch of industry, Falk Gears, Speed Reducers, Steel-flex Couplings, Motoreducers and other products—some of them regular stock items, others specially designed for unusual requirements—are reducing costs and increasing operating efficiency by doing hard jobs well, day after day and year after year. . . . Today, as throughout its fifty-six-years' history, the Falk name symbolizes progress in design, research, engineering techniques, manufacturing methods—and represents the highest standards of relationships between workers, management and customers. Small wonder that the name Falk—now as for more than half a century—is universally recognized as a **good** name in industry!

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Heavy Gear Drives ... Marine Turbine and Diesel Gear Drives and
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Established 1892

SOME TYPICAL FALK PRODUCTS



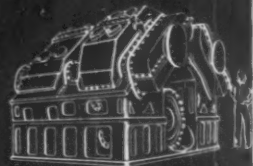
HERRINGBONE AND SINGLE HELICAL GEARS—Diameters 1 inch to 18 feet. Face widths 1 inch to 7 feet.



HIGH SPEED DRIVES—Ratios from 2:1 to 120:1. Speeds up to 8000 rpm and higher.



STEELFLEX AND AIRFLEX COUPLINGS—Types and sizes for every industrial application.



MARINE DRIVES—More than 25 million horsepower of Falk gear in ships.



SPECIAL GEAR DRIVES—Special gear drives—any size or type—any kind of service.



STEEL CASTINGS AND WELDMENT—Acid open hearth steel casting from 1 lb. to 100,000 lbs. Weldments in comparable sizes.

TRICRESYL PHOSPHATE and AMERICAN FELT

Felt is a highly adaptable material, and this has been again demonstrated in an unusually spectacular fashion, through the development of a felt product that is unaffected by tricresyl phosphate. This fluid has many advantages in hydraulic systems and other applications, but it has the disadvantage of attacking customary sealing materials. What we believe is the perfect solution to this problem is now available. It is high-grade wool felt impregnated with a special elastomer that is practically immune to attack by tricresyl phosphate.



This new product is called Vistex 8430 TCR, and is supplied either in sheets or in cut parts, for use in packings, washers, seals, gaskets, wipers. It is strong, tough, highly resistant to wear and ageing, self-lubricating, and parts made of it can be removed and replaced without injury during maintenance work. An idea of the durability of this material can be had from its use in the Electro-Matic® air filter, made by the American Air Filter Co., Inc., Louisville, Ky. This is an electrostatic filter, and the plates are cleaned by stationary and traveling wipers made of Vistex 8430 TCR, running in tricresyl phosphate. Though covered with the fluid and subjected to constant abrasive action, these wipers last from one to four years, depending upon the type of dust encountered.



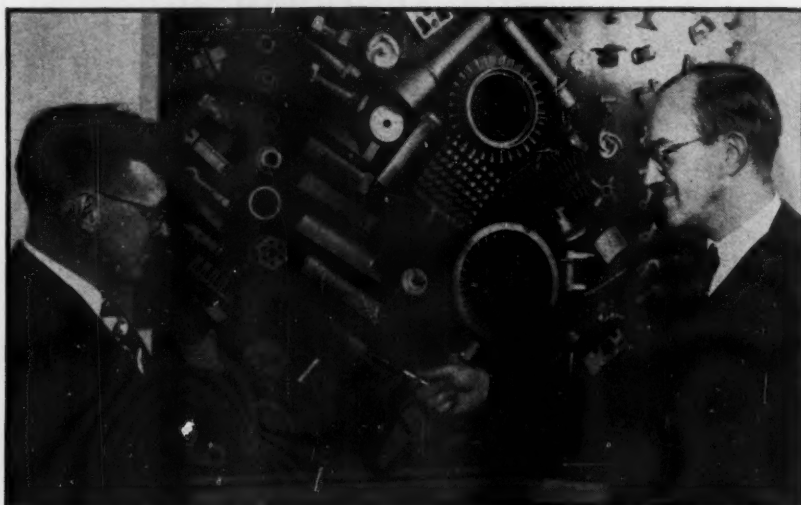
Felt has tremendous possibilities. Alone or in combination with other materials it can be given almost any desired group of characteristics. Thus it is used for sealing, wicking, wiping, polishing, vibration isolation, filtering, sound absorbing, thermal insulation, shock absorbing, cushioning, dampening, padding, packaging, surfacing, frictional purposes. Tell us what you make—felt may help you make or improve it. Write for list of 15 Technical Data Sheets.

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15 Kenneth R. Geist (left) who worked out the Allis-Chalmers' precision casting "foundry," A. K. Higgins (right), superintendent of the chemical and metallurgical laboratories, points to a precision-cast blade for an experimental coal-fired gas turbine.

Castings Move into New Fields

Allis-Chalmers has put the "lost-wax" casting technique on a production basis. It can make complicated parts to extremely close tolerances from alloys that are almost impossible to machine.

When Allis-Chalmers Mfg. Co. disclosed details of its new precision-casting plant this week, the event had a double significance:

(1) To industry it means that new markets are opened for the "lost-wax" technique.

(2) To Kenneth A. Geist (picture, above) it means he has made good his promise to add an important new division to the sprawling A.-C. enterprise of which his father, Walter Geist, is president.

• **War Problem**—During the war, Allis-Chalmers, like many another big company, made millions of supercharger turbine-buckets for the armed forces (BW—Apr. 6'46, p64). Because such blades operated under extremely high temperatures, they used complex, virtually unmachinable alloys that couldn't even be forged.

The only successful way to make them was to cast them by the "lost-wax" technique—which actually dates back centuries. The technique, then used commercially only in the manufacture of dentures and jewelry, was easily adaptable to complex alloy-steel parts. But the size of castings was generally limited to a maximum of two to three pounds.

• **Progress**—Today the picture is entirely different.

Allis-Chalmers, in its new plant, is producing precise castings up to 10 lb. in weight. Casting is not confined to

complex alloys; every common metal except magnesium and aluminum is being cast. Nor are products confined to military items like turbine blades. Instead, a long list of items is being made—and on a production basis. The list includes parts for electrical-control apparatus, industrial sewing machines, oil-well devices, hydraulic pumps, railroad gas turbines, chemical machinery, and food machinery.

Allis-Chalmers isn't the only company in the business. International Nickel Co. next week will open officially at Bayonne, N. J., a plant which is also rumored to be a "commercial foundry" setup for such complex castings. Among others in the field: General Electric Co.; Westinghouse Electric Corp.; Austenal Laboratories; Haynes-Stellite Co.; Michigan Steel Casting Co.; Kerr Dental Mfg. Co.; Arwood Precision Casting Co.; J. R. Wood Products Corp.

• **Approach**—One major drawback has held up wider use of the technique: Most companies using it approach it as a craft rather than as a commercial production job. As a result, fussy and complex machinery is used; trial-and-error procedures are applied to making the plaster-like molds; straight-line handling methods aren't considered. So costs are high; that limits markets.

After Allis-Chalmers, during its war-time operation, decided to study the process for postwar commercial exploita-

when the
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reads

CHANGE



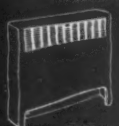
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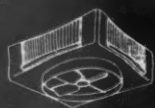
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tion, young Geist was put in charge. Metallurgy was his hobby; his favorite dream was to simplify and standardize the complicated, slow-moving "lost-wax" technique, and thus adapt it to modern manufacturing standards.

• **Questions**—He continued his experimental work long after the war contract had ended. He had to find answers to questions like these:

(1) How should a high-production precision plant be laid out to minimize handling?

(2) Should wax or plastic be used to make the replicas?

(3) At what temperature should the wax or plastic be poured, and can such pouring be done automatically?

(4) What are the best materials for making investments (the plaster-like molds into which molten metal is poured), and should they be handled?

(5) What banking temperatures are best to control investment shrinkage?

(6) What cleaning techniques work best?

• **Answers**—By trial and error, on complicated parts of all types, Geist and his associates got the answers. The new plan operates on a 'round-the-clock foundry basis, producing about 100 lb. per hour of close-tolerance castings. The plant is laid out for ultimate expansion to three times its present size.

It's true that quantity of output is small compared to that of the usual steel or iron foundry. But quantity isn't the whole goal: Precision-cast parts require practically no machining. Thus, the process permits the use of hard-to-machine metals; this opens new fields for the war-born alloys.

• **Paying Its Way**—A.C. is operating its new plant on a stand-on-its-own-feet basis, not as a "captive" foundry just to supply Allis-Chalmers. That puts the bee right on young Geist; he has to make his dream pay off in hard money. To build the market, sales-technicians are out scouting for new applications and new customers. They operate on these three principles: (1) They tell manufacturers how the technique can be applied to new uses; (2) show how the technique can cut the cost of a standard part or improve its performance; (3) educate customers' engineers on how to design correctly for precision castings.

As a check on their sales exuberance, all applications and orders are screened by technicians at the plant; in other words, no order is accepted unless it is sound from both engineering and cost standpoints.

LIQUOR-PROOF PAPER

A San Diego printer has come up with a transparent coating for printed paper that will resist water and various chemicals.

Ten years ago, printer Harry S. Jay

was asked by one of his customers if he could figure out a way to print menu cards that would resist liquor stains. Now, after a self-taught course in chemistry, he claims he can not only liquor-proof menu cards; he can also protect paper from water, desert-hot weather, and acids.

Jay coats any kind of printed paper, but different solutions are used for different service conditions.

There is a ready market. The 11th Naval District has ordered field practice signs; a beauty shop is using ear and forehead guards made of the treated paper for use under hair driers (because it resists heat, dims out the roar of the driers). Numerous uses are also foreseen for paper cartons and other containers, printed and unprinted.

Jay's company is Duro-Card Products, 520 Seventh St., San Diego, Calif. With processing methods now set up, the company says it is ready to deliver in limited quantities to any point in the country.

RADIO-ISOTOPE FILM GAGE

Research workers at Goodyear Tire & Rubber Co. have developed a new use for the radio-isotope (BW—May 22'48, p52). Last week Goodyear announced a gage that uses the isotopes to measure sheets of plicofilm and other thin films. Accurate to about one hundred-thousandths of an inch, the gage will measure the film continuously as it comes off production-line rolls.

The film passes through a slot in the gage. Below this slot there is a small bit of carbon 14. A tiny electrical current is produced from the radio-active rays in an ionization chamber above the slot. This current is amplified by tiny vacuum tubes to the point where it is big enough to operate an ordinary electric meter. The meter shows the strength of the rays—which shows the thickness of the film.

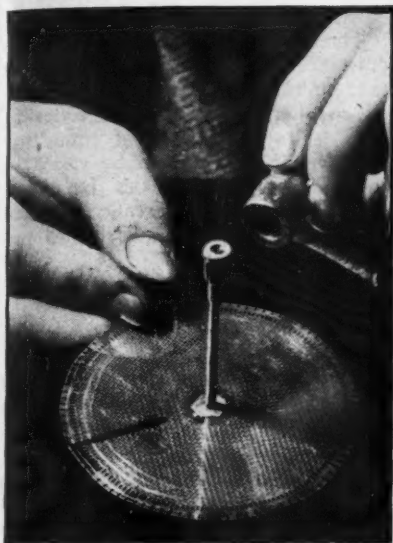
COMMERCIAL JETS O.K.

For the first time in this country, jet engines have won official approval for commercial transport use.

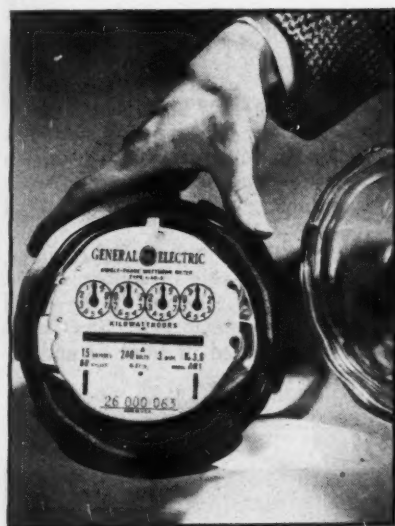
Last week, the Civil Aeronautics Administration gave its blessing to the Allison 400 jet. The Allison 400, made by the Allison Division of General Motors, is a turbo-jet engine with a rated thrust of 4,600 lb. (jets are rated by thrust rather than hp.) It powers the Lockheed P-80 Shooting Star and has been ordered by the Navy for the Grumman F9F Panther.

Allison has a later, more-powerful jet in production. According to the company, the CAA requires a later model to be in production for the military before it certifies a previous model for commercial use.

NEW PRODUCTS



Magnetic Suspension . .



... Lengthens Meter Life

A radically new type of suspension, that eliminates bearings, is used in the new "I-50" watt-hour meter made by General Electric Co., Schenectady 5, N. Y.

G. E. substitutes magnetic forces for conventional jewels, thus cuts maintenance problems (bearings are the chief offenders). The meter disk and shaft are supported by two concentric Cunico alloy magnets (top picture). The outer magnet is attached to the meter frame. The inner magnet is mounted on the end of the meter shaft. The interacting fields of the two powerful magnets suspend the entire rotating system. The shaft is kept in vertical alignment by graphite washers and a fixed guide pin.

The meter has other novel features:

Small Alnico magnets diecast integrally into the frame form a damping system that cuts out side thrust, reduces noise and vibration. Butyl rubber insulation is used on the wiring.

• Availability: immediate in small quantities.

Sheet Oiler

In high-speed stamping work, operators have to be sure that metal stock going into the press is well lubricated. If not, costly dies soon break down under friction. Gray Mills Corp., Evanston, Ill., now makes this lubrication automatic in a new system called the Stocklube. The system applies a film of oil to metal coil, strips, or sheets fed into the press.

A heavy-duty pumping unit delivers lubricant under pressure to the oiling chamber on the press. As the stock passes through this chamber it is coated with oil on both sides. Excess lubricant, squeezed off by rollers, then drains back to the pump reservoir for recirculation.

According to Gray, both sides of the stock get an even coating—even on inclined presses. Loose dirt and grit are flushed away. The systems are now being made for stock up to 24 in. wide.

• Availability: three weeks.

Portable Mixer

Blaw-Knox Co. has swung into commercial production on a new portable bulk-cement batching plant. The plant can be expanded from a 200 bbl.-capacity to a 400 bbl. or 600 bbl. setup by installing an auxiliary bin.

To speed assembly, the entire bin section is built as a one-piece welded assembly. The steel platform framing that supports the weighing batcher is also shipped and put up in one piece. A vertical inclosed bucket elevator, rated at 50 tons per hour, and a 9-in. screw feeder serve the plant. Auxiliary and main bins are designed alike; they come in either 200-bbl. or 400-bbl. sizes. The manufacturer's address: 2042 Farmers Bank Bldg., Pittsburgh.

• Availability: 90 days.

Robot Sprinkler

Lawn sprinkling for industrial grounds and homes is controlled automatically in a system marketed by Lake Union Sales Co., 1515 Fairview Ave., Seattle. The Tom Sawyer Automatic Sprinkler Control regulates the hours a sprinkler operates; it also governs the amount of water that various sections of the lawn get.

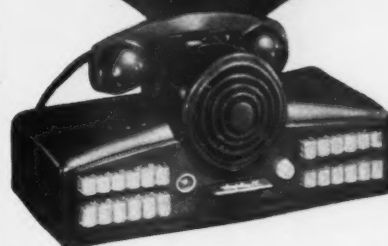
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time clock you can set the time of day and the days of the week that you want the lawn watered. After that, operation is automatic for the rest of the season.

Three or more watering circuits, hydrostatically operated, work one at a time in rotation. They come on and off in short periods—like a series of quick showers. Length of time that each circuit operates can be varied so that the system sprinkles longer in sunny spots, a shorter time in shady areas. Controls can be adjusted to suit varying soil conditions.

• Availability: immediate.

Big Air Mover

Air in a four- or five-room house can be changed every two minutes with a portable fan developed by Westinghouse Electric Corp., Springfield, Mass. A 16-in. model, the Mobilair, has two design features that Westinghouse says boosts the fan's air-moving power to the level of a 20-in. or 24-in. unit: (1) large-surface, sharp-angled plastic blades; (2) curved injector rings around the blades. Total air displacement is about 3,000 cu. ft. a min.

The increased twist of the blades raises the fan's capacity by moving bigger chunks of air. The injector rings, curved in the direction of air flow through the fan, turn the side air so that it slides into the air stream without turbulence—like merging lanes on a highway.

The fan stands on two steel columns, mounted on a pair of rubber wheels. Weight is 35 lb.; height can be varied from 3 ft. to about 5 ft. Steel mesh screens are placed in front of and behind the blades.

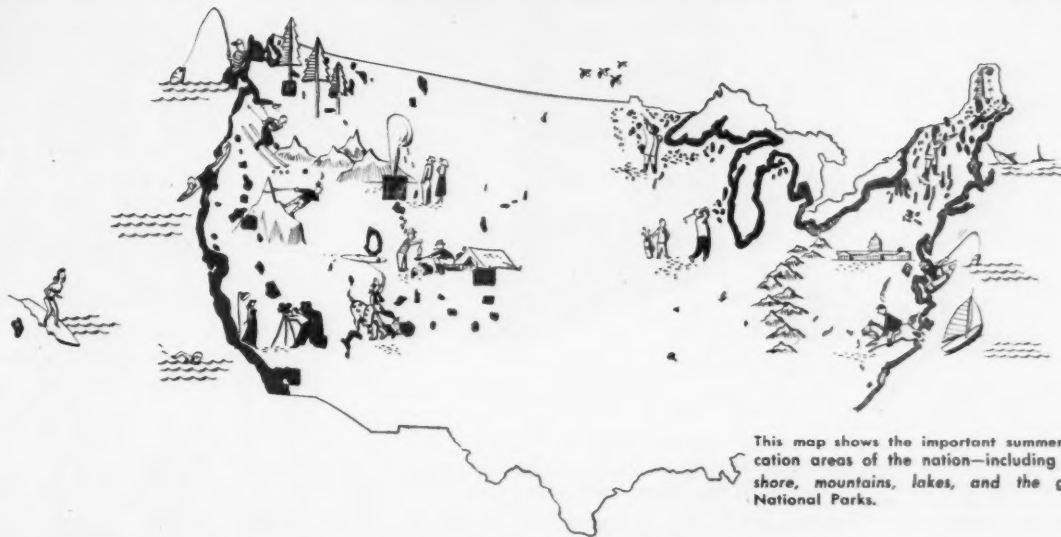
• Availability: immediate.



Strong Solenoid

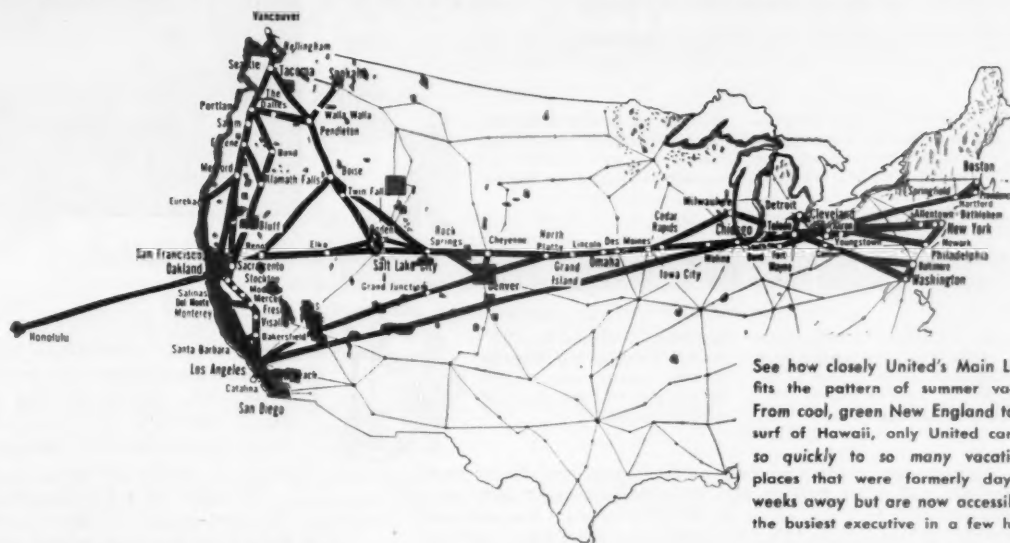
G. H. Leland, Inc., has added something new to its line of Solenoids (coils on metal cores which produce a mag-

These are the summer vacationlands



This map shows the important summer vacation areas of the nation—including seashore, mountains, lakes, and the great National Parks.

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See how closely United's Main Line Airway fits the pattern of summer vacationland! From cool, green New England to the sunny surf of Hawaii, only United can take you so quickly to so many vacation spots—places that were formerly days or even weeks away but are now accessible to even the busiest executive in a few hours.

Plan Vacation Side Trips on Business Flights

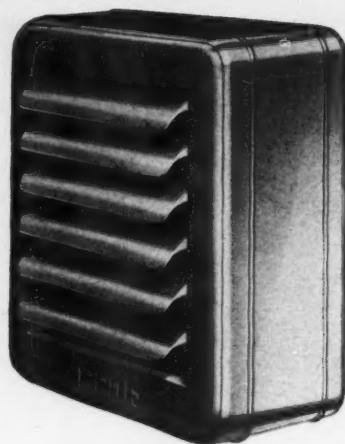
Fly United and use the time you save for pleasant side trips. United offers many optional routes. For example, on a flight from Chicago or the East to San Francisco, you can return by way of Los Angeles or Portland at no extra cost. Plan stopovers where you wish, and visit Yosemite, Yellowstone, other famous places. You'll never have a better chance!

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And small! A unit less than 20" square, weighing less than 60 pounds, warms over 1,000 square feet of floor space in sub-zero weather!



This compact new product of the world's largest manufacturers of unit heaters and other heating and air conditioning equipment is designed especially for stores, offices, factories.* There's a size and style that's right for you. Stocked by 300 distributors for prompt delivery. Get details from any of the 80 Trane Sales Offices, or direct from the factory. Ask for the new Trane Type H Unit Heater.

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netic field): a rotary model that produces a starting torque of 50 pound-inches. The Ledex No. 8 solenoid measures 3½ in. in diameter, weighs slightly more than 4 lb.; its rotary stroke is 45 deg.

Compact design is said to assure maximum magnetic efficiency. Users can also get a dustproof cover, self-contained return spring, and other extras to adapt the solenoid to a variety of applications. Wire sizes will handle direct current ratings from 6 v. to 550 v. Leland can supply rectifiers for operation on alternating current. Maker's address: 123 Webster St., Dayton 2, Ohio.

• Availability: about two weeks.



Sidewise Control

By putting the driver and his controls sideways in a heavy-duty lift truck, Mixermobile Manufacturers accomplishes two things: (1) improves visibility and control of the load; (2) makes operation easier (the driver can check truck movement forward or backward by merely glancing to the side).

Mounted on a tricycle running gear, the company's Wagnermobile Duo-Way Lift has front-wheel drive, a tail steering wheel. Controls are hydraulic with the exception of a mechanical carriage hoist control. Loads (up to 16,000 lb.) are lifted with a cable on a roller-bearing carriage that moves along a hoisting track. The track, mounted on a pivot, can be tilted forward or backward. With the top section of the track folded down, over-all height of the machine is 9 ft., 6 in.

Powered by a 114-hp. engine, the Duo-Way will travel forward at speeds up to 20 mph., 30 mph. in reverse. The manufacturer's address: 6855 N.E. Halsey St., Portland, Ore.

• Availability: 30 days.



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Hauserman *Movable Steel Walls* are the most modern and practical of all partitioning methods. They eliminate the time waste of erecting and tearing down tile and plaster walls. There is no annoying dust, dirt and grit . . . no costly damage to furnishings, machinery or equipment.

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Let Hauserman do your entire partition engineering job. Hauserman is a *complete* engineering, manufacturing and service organization. No scattering of sub-contracts or dividing of responsibilities. And no "orphaning"—Hauserman *Movable Steel Walls* have been made and serviced continuously since 1917.

Hauserman *Movable Steel Walls* can save you money, whether you are remodeling a small office area or building a great new structure. *Ask us to help you.*

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Now ... Packaged Vibration Control

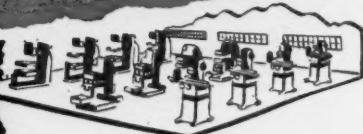
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Air Conditioners
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Vibration Control is easily accomplished with Lord Chan-L-Mounts. Vibration in the mounted machine is effectively controlled... and neighboring machines protected from transmitted vibration.

Chan-L-Mounts may be used for a wide variety of light and medium weight machines. There are no special fixtures, no holes to drill. The channel holds the bolt head firmly in place and the nut is quickly tightened with a single wrench. The flexing element is designed to control vibration caused by occasional shock load and impact as well as that of normal operation. A substantial section of soft rubber beneath the supporting channel protects against metal-to-metal bottoming... the rigid, one-piece base prevents spreading under load. Minimum stress on rubber-to-metal bond means longer life.

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LORD

READERS REPORT:

Standardization Wanted

Sirs:

I was glad to note your Production Pattern on freight car standardization [BW—Apr. 17 '48, p. 62].

I hope you will follow this up by other articles and editorial comments as to lack of standardization among the railroads. Apparently, it has been a habit for many years for engineers employed by the railroads to take great pride in designing specialized equipment differing slightly from that used by other roads and, while this may give satisfaction to their ego, it results in unnecessary engineering salaries for the railroads and, what is worse, increased costs of equipment.

It is unlikely that the railroad industry will ever reform itself from within, so I hope you will keep after the situation and that eventually directors of individual railroads will finally assume their responsibility to really direct and eliminate some of this unnecessary waste.

C. OLIVER WELLINGTON

SCOVELL, WELLINGTON & CO.,
NEW YORK, N. Y.

Withholding Taxes

Sirs:

In your story on the income tax cut [BW—Apr. 3 '48, p. 21] there appears the following paragraph:

"This is one warning the tax collector makes: There will often be a bigger cut in the withholding tax than there will be in the final tax due. Reason: The new withholding rates will be geared to the married taxpayer who expects to take advantage of the split-income provision. So more than likely, the single taxpayer will find that his employer takes too little out of his pay to meet all the tax due."

It is our understanding that the new withholding tables do not take into account any savings to taxpayers which result from the splitting of incomes...

GEORGE S. EATON

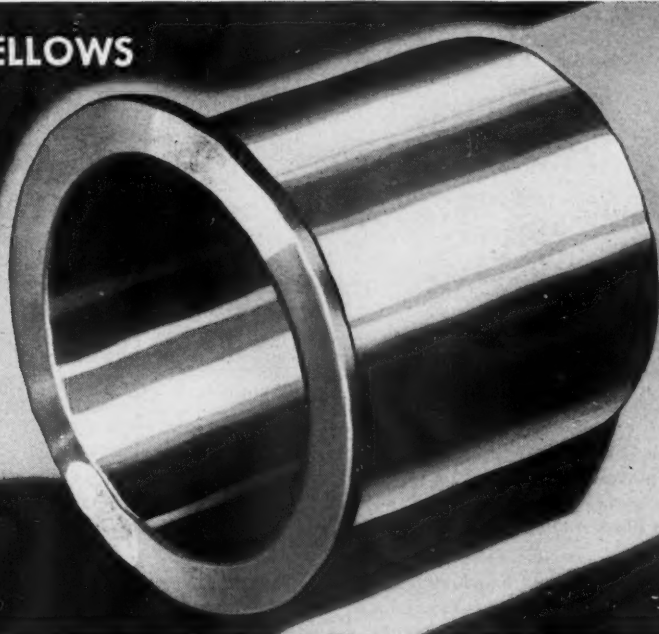
EXECUTIVE SECRETARY,
NATL. TOOL & DIE MFGRS. ASSN.,
CLEVELAND, OHIO.

• In effect, we are both right in our interpretations of the withholding regulations under the new tax law. The new tables do not specifically take into account the savings to taxpayers which result from the splitting of incomes. But the new withholding tables are based on the first (lowest) surtax bracket only. (In the old law the first two surtax brackets were reflected in the withholding rates.) Here is an ex-

OILITE

THE *Oil Cushion* BEARING

AND BIG FELLOWS
TOO—UP
TO 24"



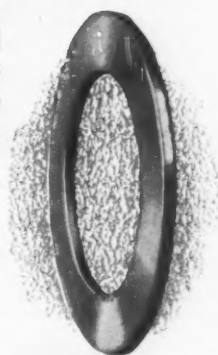
...with Automatic Self-Lubrication



Plain Sleeve

OILITE is the heavy-duty OIL CUSHION Bearing built for surplus performance capacity necessary to meet unexpected emergencies. OILITE Bearings are used on all types of equipment from toy trains to heavy locomotives. They furnish metered lubrication without waste. Additional OILITE advantages are:

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- Mail us your blueprints. Address Department K.



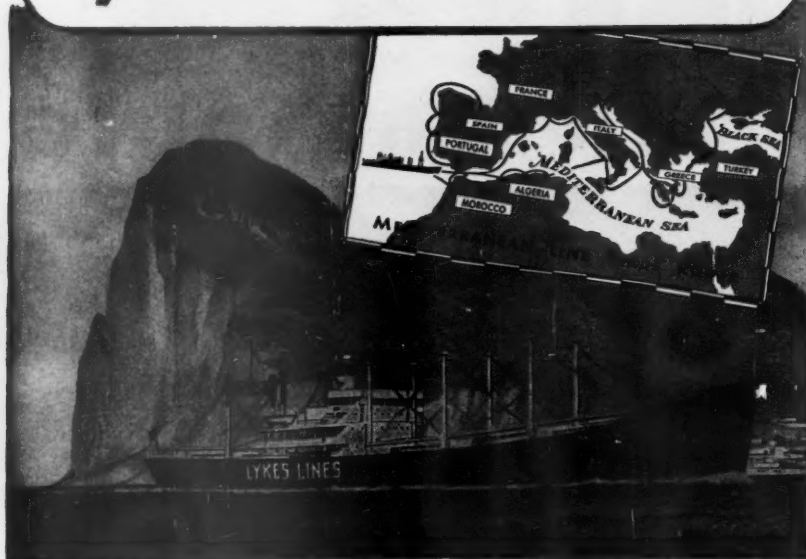
Thrust

AMPLEX MANUFACTURING CO. DETROIT, 31 MICHIGAN

Division of Chrysler Corporation

FIELD ENGINEERS AND SUPPLY DEPOTS IN PRINCIPAL CITIES

Lykes...FROM GULF TO GLOBE



A LYKES Mediterranean Line vessel passing the towering Fortress at the entrance to the Straits of Gibraltar.

THE Mediterranean Line is one of Lykes six major world trade routes between United States Gulf ports and the globe. Its fast, regularly scheduled C-type cargo vessels provide an endless chain of commerce connecting Mid-America with the continents bordering the blue Mediterranean.

The U. S. Gulf is the nearest, most economical gateway to world trade for exports and imports of Mid-Continent and Southern States. Throughout generations of ocean shipping experience, Lykes has kept pace with new methods, new equipment for the prompt, safe handling of cargoes. Its American flag ships are part of our Merchant Marine, in the service of all America.

Passenger facilities, too! A limited number of comfortable accommodations are available between all ports of call served by Lykes world-wide fleet.

Write for the folder, "Lykes Lines and Gulf Ports." Address Lykes Bros. Steamship Co., Inc., Dept. C., New Orleans, La.



American Flag Trade Routes

MEDITERRANEAN LINE — From U. S. Gulf and South Atlantic ports to Italy, Spain, Portugal, France, Greece, North Coast of Africa, and other Mediterranean and Black Sea areas.

CARIBBEAN LINE — From U. S. West Gulf ports to Cuba, Haiti, Puerto Rico, Dominican Republic, Venezuela, East Coast of Colombia and Canal Zone.

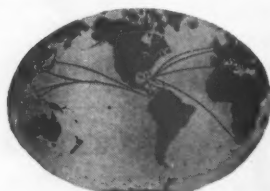
U. K. LINE — From Tampa, New Orleans and U. S. West Gulf ports to England, Scotland,

Ireland and Wales.

CONTINENT LINE — From Tampa, New Orleans and U. S. West Gulf ports to Continental Europe and Scandinavia.

AFRICA LINE — From U. S. Gulf ports to South and East Africa.

ORIENT LINE — From U. S. Gulf ports to Far East including Philippines, China, Japan, Korea, Siam, Straits Settlements, Dutch East Indies.



LYKES LINES

Lykes Bros. Steamship Co., Inc.

Offices at: NEW ORLEANS, HOUSTON, GALVESTON, NEW YORK, Baltimore, Beaumont, Chicago, Corpus Christi, Dallas, Gulfport, Kansas City, Lake Charles, Memphis, Milwaukee, Mobile, Port Arthur, St. Louis, Tampa, Washington, D. C.
OFFICES AND AGENTS IN PRINCIPAL WORLD PORTS

ample from the Bureau of Internal Revenue that shows what that means:

A married man with \$4,000 of taxable income will split that and be liable for the lowest 16.6% surtax rate on each \$2,000, rather than being liable for a higher tax rate on the second \$2,000. Therefore, the new withholding tables square him when it comes time to make his March, 1949, return. But the single man, too, with a \$4,000 taxable income has been withheld on the basis of only the first surtax bracket. Therefore, as we said: "More than likely, the single taxpayer will find that his employer takes too little out of his pay to meet all the tax due."

Pulp Digestion Missing

Sirs:

I wish the processes of paper making were as simple as indicated in your picture story [BW—May 8'47, p65]. It would have saved us about \$10-million building a pulp mill, said pulp mill being eliminated completely somewhere between pictures 2 and 3.

The wood chips in second picture must be cooked in huge digesters for many hours . . . before the desired fibers are freed. It is these fibers that then go into the beater whose job is merely to flatten, separate, and prepare the fibers for interlocking to form the ultimate sheet of paper.

Pulp in the beater is about 92% water and reaches the 99.5% only when just ready to flow onto the wire screen of the Fourdrinier.

Caption 7 is a bit misleading too. Paper comes off of the machine on one reel from which it is transferred to a rewinder for slitting into mill rolls. Four to eight and even more of these rolls go on to cutters for simultaneous handling in order to be put into square sheets for ruling.

GLENN STEWART
KALAMAZOO VEGETABLE PARCHMENT CO., KALAMAZOO, MICH.

• Thanks to Reader Stewart and several other observant paper-industry executives for calling our attention to the fact that we didn't digest our pulp.

Generators' Ratings

Sirs:

Your picture caption [BW—May 8'48, p24] says that the Grand Coulee generators have name-plate ratings of 180,000 kilowatts though loads of 126,000 kilowatts are handled easily.

This apparently involves a typographical transposition of digits; as the ratings of those generators are 108,000 kilowatts each.

CHARLES G. CLEVELAND
WESTINGHOUSE ELECTRIC CORP.,
NEW YORK, N. Y.

Close Play In a "MINER LEAGUE" BALL GAME!




Safe at second—by a split second! The game you see in progress above is part of a red-hot "pennant race" in a 14-team softball league—and every one of the league's players is a coal miner!

So popular has softball become in this coal mining area that floodlights for night games were recently installed by the mining company which maintains the field.

Progressive coal mine management is taking an increasingly active part in providing modern recreation facilities for miners and their families. Among these facilities are swimming pools, summer camps, picnic areas, playgrounds, and meeting places for youth organizations. They are another illustration of the progress being made in bettering community life for coal miners.

MODERN WORKING CONDITIONS have also come a long way—due largely to the mechanization program sponsored by the country's progressive coal operators. Nowadays, more than 91% of all bituminous coal mined underground is mechanically cut, and about 60% is mechanically loaded. Only about 4% is mined by pick and shovel.

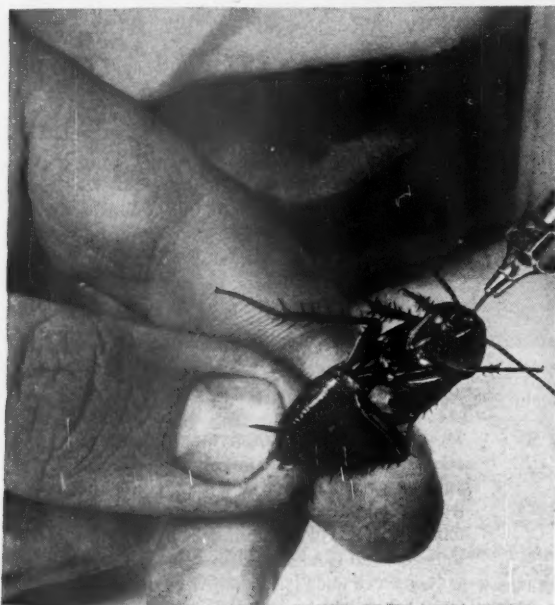
Thanks to huge investments in mechanized equipment and to skilled management and keen competition within the industry, America's bituminous coal mines are the most productive in the world. And they pay the highest average wages of any major industry.

BITUMINOUS  COAL
BITUMINOUS COAL INSTITUTE
A DEPARTMENT OF NATIONAL COAL ASSOCIATION
WASHINGTON, D. C.

BITUMINOUS COAL . . . LIGHTS THE WAY . . . FUELS THE FIRES . . . POWERS THE PROGRESS OF AMERICA



SUPERSONIC FLIGHT: A 650-mile gale can tear the eyes out of a man's face and scorch a cockpit to 250°—so science devises new protection for pilots flying faster than sound.



PEST CONTROL: Cockroach under anesthesia gets "guinea pig" treatment as science launches new attack on insects which cost U.S. fully \$1.5 billions a year in damage and disease.



Science

** illustrated **

why Science can
** illustrated **

Posted on these pages are random excerpts from **SCIENCE illustrated** for June: supersonic flight and pest control . . . lightning and alcoholism—what *people are doing for people* in the world of science today.

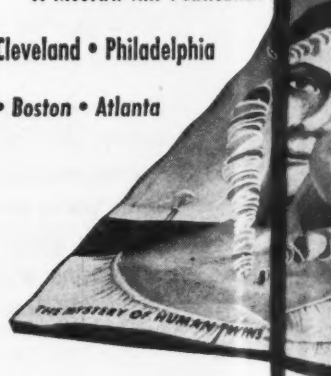
This sort of fare, through unmatched formula and technique, is mighty exciting to a great and growing audience every month. And practical proof that this audience is remarkable for profitable sales action is exciting to more and more advertisers.

For a quick glimpse into new, definitive studies of the **SCIENCE illustrated** market—already over 500,000 net paid, over 1,500,000 total readers—consult the facts and figures summarized in three significant headings on the right.

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pay off for YOU

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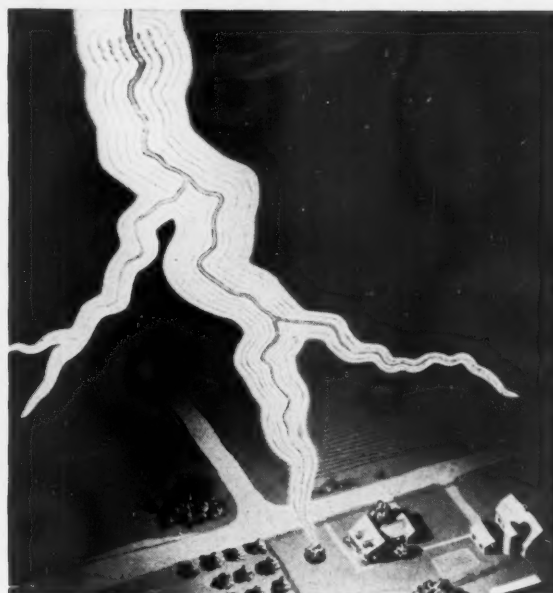
BETTER EDUCATION
19% more are college trained (SI:54%)

BETTER OCCUPATION
29% more are executive or professional (SI:43%)

BETTER FAMILY INCOME
16% more earn \$5,000-plus (SI:37%)

*From recent studies by The Psychological Corporation; details on request.

Your nearest SI man can help you apply this pay-off potential to your own marketing problems. And the big June issue awaits you at the nearest newsstand. It will pay you to get better acquainted with both.



LIGHTNING: What goes on inside the billion-volt electron-avalanche called a thunderbolt; what it can do to you; and what science is doing about it for you — in detail.



ALCOHOLISM: Psycho-physical sciences converge on world's least understood illness in new, clinical approach; first authoritative, comprehensive report ever to be published.



[illegible]

Restrictions on tin . . .

... Give glass its chance in the ...

Renewed Battle for the Container Market

The glass industry leads off with its disposable beer bottle in a promotional drive to regain ground lost since the war.

The glass container industry's bid to regain the ground it has lost since the war got into high gear this week.

• **Sales Drive**—Owens-Illinois Glass Co.'s "Lookit Girl," pictured above, is only one of the lures with which the industry is trying to win consumers back to glass.

The glass makers figure that the time to make inroads on their old, arch rival—tin—is now or never. For now, the government, in a very real sense, is in their corner.

That has happened before. During the war, stringent restrictions on the use of tin gave glass containers something of an advantage.

Then the tin limitations were loosened up a lot. Immediately, tin recouped—and in some cases enlarged—its market.

Now tin is back under tighter restrictions. So the glass people figure it's their inning again, are planning to bat just as hard as they can.

- **Order M-81**—The key to the situation lies in the government's Conservation Order M-81 (above). It is one of the last few remnants of wartime controls

over scarce materials. Tin, which the government is stockpiling, is still on the list. (So are antimony, quinine, oils, fats, a few other items.)

The amended M-81 appeared early this month. As it now stands, it specifies the exact amount of tinplate (or terneplate) that can go into containers for products in 228 categories.

• **Clamps on Production**—M-81 also contains—and this has the greatest strategic importance in the tin-glass battle—restrictions on production of tin cans for coffee, beer, oil, and pet foods. For example: This year can makers cannot use more tinplate for beer cans than they did last year. And they must limit tinplate in pet food cans to 75% of the amount used in 1947.

Last week another amendment to M-81 gave the can makers a small break: It allows them to manufacture coffee cans in 2-lb. sizes. This will save a considerable amount of tinplate—if, of course, consumers accept the large size.

• **Glass Containers Off**—Faced with too much business and too many restrictions, tin can makers have little use for

large-scale promotion. But this doesn't hold for the glass container industry.

Glass container shipments, according to Commerce Dept. reports, reached a high in 1946 and have been tapering off since. This has been largely due to the renewed competition from tin cans: Can makers have been winning back old markets, building volume in new ones.

Closure shipments reaffirm this story. The caps that seal bottles weren't in as much demand in 1947 as in 1946. Here is the closure shipment situation:

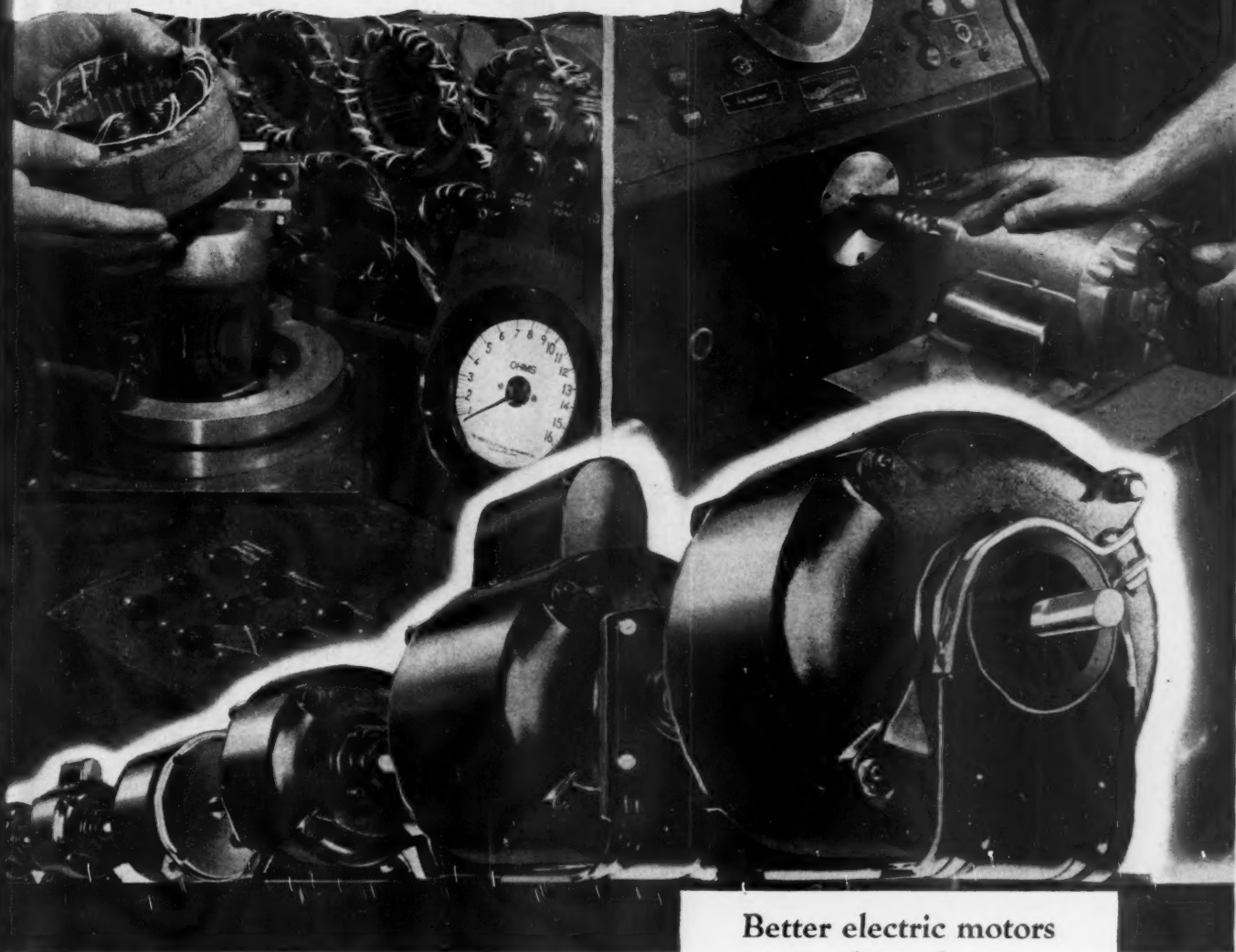
	1946	1947
	(in thousands)	
Food	9,426,803	6,709,740
Non-food metal.....	4,014,563	3,116,173
Non-food plastics.....	2,543,792	2,162,746

In the beverage field, glass containers did better (undoubtedly because of their domination of the soft drink business). Closure shipments for 1946 were 289-million gross; last year the figure was up to 320-million gross.

Here is the way the picture looks:

Foods. Use of both tin cans and glass containers by the preserving and canning industries began to slip last year. Glass container shipments dropped 20% in 1947, tin can shipments 7%. The trend may continue this year. Reason: Consumer resistance to high

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Aircraft Inverters

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Rock Island Freight Representatives (272 competent, trained men) are strategically located in 71 cities. Phone or write the one nearest you for helpful information on rates and routes, as well as for advice on packaging, marking and stowing. Ship via Rock Island!

*J. D. Farrington, President
Chicago, Rock Island and
Pacific Railroad Company*



prices has cut sales. Inventories have been piling up on distributors' shelves.

Normally, this decline would mean more to can makers than to the glass industry. Glass container makers ship only about 35% of their production to the food industry, while can makers ship about 70%. But despite any drop in their output, food packers will still find the tin supply tight this year.

Lard and shortening. Glass containers have lost volume here: Can makers got back into the market in 1946, have raised shipments ever since. Their February shipments were 80% over January.

Baby foods. Here the glass makers are optimistic: They got about 60% of the baby food business in 1947 and expect to hold it this year. The glass people pin their hopes on the display appeal of glass containers, which dealers like.

Coffee. The can makers have made their second biggest postwar gains in coffee cans (their first is in beer). The result is a direct loss to the glass makers, who had a big share of the market during the war.

Milk. Glass makers have re-introduced the square milk bottle, which fits better in home refrigerators. Despite competition from paper containers, glass bottle shipments have been gaining. But they had a setback during the first quarter of the year. Glass producers aren't worried by this, however. They think higher paper costs will favor them.

Soft drinks. Bottle makers had a bonanza in 1947—more than 10-million gross—and look for another one. March bottle shipments doubled February.

Bottle makers aren't particularly worried by reports that two leading can makers are readying soft drink cans—like beer cans—for a tryout this year. They argue that there isn't enough tin to go around as is.

Beer. The bottle makers haven't done so well here, but future prospects look very good.

Packaged beer sales are growing: In 1940 sales of draft and packaged beer ran neck and neck; last year packaged beer sales were 68% of the total. This summer they may go on up.

Last year brewers bought 2.1-million beer cans, 1.9-million bottles. This year can makers will be restricted to the 1947 figure; this will probably mean allocations to brewers. And it could also mean a bigger field for bottles.

• **Disposable Bottles**—The glass container people are going to seize on the moment to sell their one-way, disposable beer bottle to the brewers and public. They figure that now is the time to do it, before the heavy summer consumption begins.

The one-way beer bottle could be the answer to the glass industry's prayers. It has two slick marketing assets: (1) It supplies bottle makers with a peppy new

advertising angle, and (2) it is done for—like the tin can—after one trip.

The tip-off for the disposable bottle drive came from the glass makers' experience in the first quarter of the year: Beer bottle shipments as a whole ran about 10% behind the same period in 1947. But the drop was entirely in returnable bottles; one-way bottles shipments increased. There are a number of reasons for this: Merchants and customers seem to prefer disposable bottles; brewers like them because they cut transportation costs.

• **The Campaigns**—The Glass Container Manufacturers Institute is running an institutional advertising and promotional campaign on behalf of the disposable bottle. It is concentrating on selected areas on the East and West Coasts.

Owens-Illinois, biggest glass container maker, has its own campaign to push the one-way bottle. It is already working on the brewers and dealers. And this week it will break a consumer advertising campaign.

First, the industry hopes to establish its new disposable bottle on a permanent basis. Then, it will start promoting glass packaging for coffee, shortening, and other fields.

Business Predictor

Univac, machine developed by Bureau of Standards, computes chances of success of new business in given community.

Are you thinking of opening a flyswatter factory in Oshkosh, Wis.? Machines will soon be able to tell you whether the idea will make you millions—or land you in the poor house.

Univac, a high-speed electronic computer to be installed at the Bureau of Census, will be able to do a crystal-gazing job for almost any business venture you contemplate. For Census to figure this out in its head would take weeks; with Univac, it will take a few minutes.

• **The Preparation**—Suppose it's selling electric heaters in West Overcoat, Wyo., you want to know if your dream of a \$150,000 retail and servicing house would boom or bust. Here's how Census and Univac would get you the answer:

(1) Census first collects all the information it has on West Overcoat from population, business, and other Census files.

(2) It feeds this information, already on punch cards, into a unit which transfers all the data to a magnetic tape.

(3) Census then takes another tape (already prepared) which carries full instructions for Univac covering prob-

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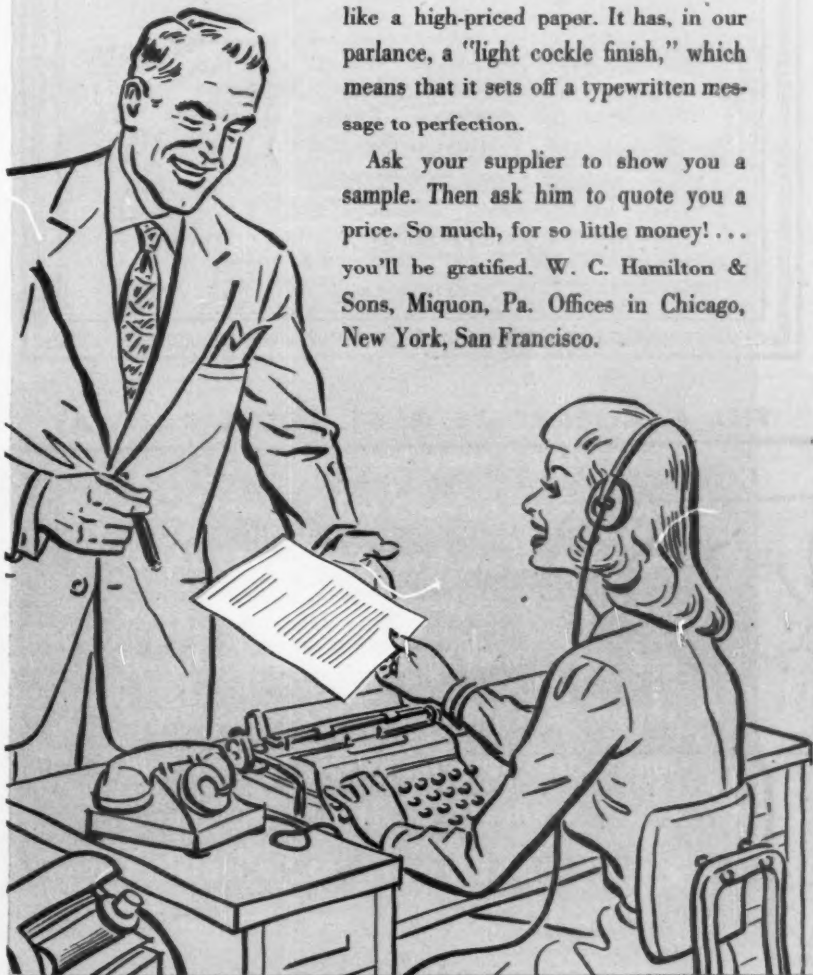
Business Letter Bond

To fill the long-felt need for a really good writing surface for business correspondence, Hamilton is now offering "Business Letter Bond"... a paper especially designed for business letterheads.

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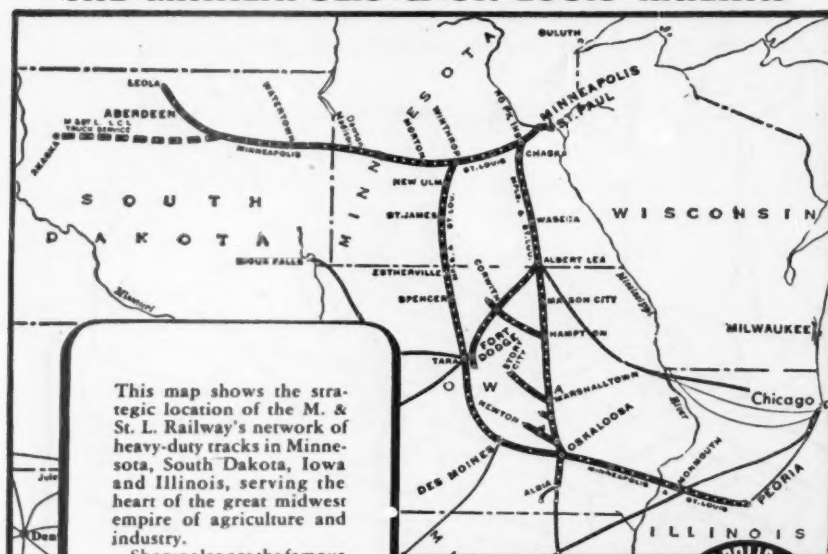
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Los Angeles	Phoenix	Seattle	Portland
Vancouver	Montreal	Havana	London

THE MINNEAPOLIS & ST. LOUIS RAILWAY



This map shows the strategic location of the M. & St. L. Railway's network of heavy-duty tracks in Minnesota, South Dakota, Iowa and Illinois, serving the heart of the great midwest empire of agriculture and industry.

Shown also are the famous Peoria Gateway and other important connecting-line junctions, through which the M. & St. L., a modern efficient freight carrier, speeds midwest and transcontinental traffic.

TRAFFIC OFFICES
IN 36 KEY CITIES



The Minneapolis & St. Louis Railway

lems of starting new retail businesses.

(4) A third tape is prepared with all information needed in this particular case: the facts that the business is for electric heaters, will cost \$150,000, will handle only the antarctic brand—any information which the businessman must supply.

• **The Figuring**—Finally, the bureau feeds all this information into Univac, which does the rest. Carrying out the orders of the instruction tape, Univac checks over all the information supplied by the other tapes. It determines things like present consumption, number of retail and wholesale stores already there, whether there is any electric current, whether there are enough people there.

Univac combs the infinitesimal facts that Census and the businessman have supplied. It figures them against the formulas on the instruction tape: multiplies, adds, subtracts, extracts square roots, deftly manipulates 10-digit figures—and comes up with the answer in minutes.

• **The Answers**—Here's what might come out:

(1) "There are already 30 such establishments there; it won't work."

(2) "You're rich—open up quick; the high altitude and cold nights create a heavy demand for electric heaters."

• **Test in 1950**—The Bureau of Standards, creator of Univac, expects the first machine to be ready in about 18 months. It's earmarked for Census, who'll test it in 1950. After that, look for Census aids to business to increase.

NEW FTC CANDY ATTACK

The Federal Trade Commission is keeping up its broad attack against alleged unfair practices in the manufacture and sale of candy (BW—Dec. 6'47, p62). Last week it took its biggest bite of candy yet: It accused 10 makers of discriminating illegally against some of their customers in favor of others.

The companies involved: Wayne Candies, Inc., Fort Wayne, Ind.; Melster Candies, Inc., Cambridge, Wis.; Luden's, Inc., Reading, Pa.; D. L. Clark Co., Pittsburgh; Williamson Candy Co., Chicago; Bunte Bros., Inc., Chicago; Sperry Candy Co., Milwaukee; Queen Anne Candy Co., Hammond, Ind.; Switzer's Licorice Co., St. Louis; William Wrigley, Jr., Co., Chicago.

FTC says the companies discriminate on prices, services, facilities, and payments or allowances of brokerage fees. It also charges indirect discrimination in the form of free deals, premium offers, quantity discounts, and rebates or allowances. The favored customers, according to the commission, are chiefly vending-machine operators and chain and syndicate stores. The chief sufferers, says FTC, are small independent retailers.

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BRANCHES IN LEADING CITIES

Retail Boom

Spring sales—after slow pre-Easter start—pick up nicely in March, April, may forecast record-smashing 1948.

Things are looking brighter and brighter for retailers. Two months ago they were shaking in their boots. This week they were happily predicting that 1948 will be another record-smasher.

• **Slow Start**—When Easter sales got off to a dragging start, many retailers thought that the day of reckoning finally had come (BW—Mar. 27 '48, p21). Then in the last week before Easter business began to pick up (BW—Apr. 10 '48, p21). The spurt continued after the holiday, and store managers started breathing easier. Instead of putting merchandise on the markdown counters, they watched it move out briskly at regular prices.

With the spring season safely behind them, retailers now figure that 1948 will top 1947. They are counting on the tax cut to put more spending money in customers' pockets. And they hope that all the talk about the new armament program has killed off the idea that prices are going to come down anytime soon.

• **No Kidding**—Figures released last week end by the Dept. of Commerce

show that storekeepers were not fooling themselves about the pickup. April business came to \$10.5-billion—about 11% above April, 1947. On a seasonally adjusted basis, the index of retail sales rose from 327 in March, 1948, to 334 in April.

This represents a new high for the seasonally adjusted index. It is 3% above the average for the previous six months. And it is 1% above the previous peak, reached in December, 1947.

• **Durables Best**—Most of the gains in April came in the durable goods group. Home-furnishing stores were up about 8% over March, after seasonal adjustment. Other durable goods retailers showed gains of about 4%. Here is the way the indexes for the durable groups stacked up:

	April 1948	March 1948	April 1947
Automotive	290	280	234
Bldg. materials, hardware	402	388	232
Home furn.	468	432	390
Jewelry	406	392	436

• **Nondurables**—In nondurable goods, the gains were less flashy. This is the picture, index-wise, by store groups:

	April 1948	March 1948	April 1947
Apparel	293	292	293
Drug	252	256	249
Eating-drinking	428	422	414
Food	377	373	332
Filling station	260	252	200
Gen. merchandise	265	253	245
Other	330	339	314



Borrowed Umbrellas Are Also Free Ads

To boost rainy-day sales, Shillito's department store in Cincinnati offers free umbrella service between its main store and garage across the street. Customers borrow an umbrella from the stand and replace it in a similar rack after crossing the street.

The umbrellas have "Shillito's" lettered across them in big letters, so customers carrying them are walking ads for the store. The management says that rainy-day sales have definitely improved since the umbrellas were added.

FINANCE



METROPOLITAN LIFE'S Parkchester development in New York City, and . . .



BANKERS NATIONAL LIFE'S Carteret (N. J.) Village would cost far more today

Insurers Wary of Housing

Afraid they can't get a satisfactory yield, say life insurance companies, because of current high building costs. Hence, many new rental projects are being shelved.

The nation's "Mr. Blandings" aren't the only ones who have been bothered by the high cost of home building recently. Even the well-heeled life insurance companies are shelving—at least temporarily—plans for many large-scale rental-housing projects.

• **Big Factor**—That's bad news. The life insurance trade has been a big factor in the battle to relieve the serious postwar shortage of housing. Its housing projects have been the largest direct contribution that frantic home-seekers have received from any single private source.

At the beginning of 1948, for example, there were some 100,000 persons living in rental housing projects built

and operated by life insurance companies. And similar developments for another 100,000 people were then being built. More than \$400-million of life company assets had already been invested, or were earmarked for investment, in such projects. Two-thirds of this investment represented postwar building.

• **Survey**—For a time, at least, such activity is due to decline sharply. Here's a birds-eye view of what's immediately ahead, as reported last week by the Institute of Life Insurance:

METROPOLITAN LIFE INSURANCE CO. has no plans for building any new hous-

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May 27, 1948

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May 27, 1948.

ing units. Metropolitan has long been the trade's leader in the housing field. But its only present activity is the completion of projects already started.

PRUDENTIAL LIFE INSURANCE CO. has shelved an ambitious plan for large-scale entry into the field. Back in 1946 it made a nationwide survey of housing needs, with the idea of investing some \$100-million in moderate-rental developments. Thus far, only \$5-million of this has been spent; only two small projects are under way.

EQUITABLE LIFE ASSURANCE SOCIETY has decided to postpone indefinitely construction of a 1,000-apartment project in New York City, for which it has already bought the land.

NEW YORK LIFE INSURANCE CO. is considering eventual expansion of its investment in housing projects. All such plans are still in the paper stage, however—except one project where rentals will run as high as \$50 monthly per room. Otherwise, its only activity is completing housing projects already started.

The Mutual Life Insurance Co. of New York, other member of the trade's "Big Five," is also determined to maintain a hands off policy. So are a long list of smaller life companies.

• **New Law**—Take, for example, the Pennsylvania life companies. That state only recently passed a law which permits its native life insurers, like those in New York, to invest up to 10% of their assets in housing. So far, not one company has taken real advantage of the new law.

Philadelphia's Penn Mutual Life Insurance Co., Pennsylvania's largest life company, does intend to enter the field eventually. But John A. Stevenson, its president, recently bluntly said that his company won't build any housing projects until prices slide off "20% to 33%."

Another Philadelphia company is reported to have considered more than 30 sites for housing projects. It has already bought land on which it plans to build a 1,000-apartment project eventually. But it is going to do nothing until building costs come down.

• **Social Obligation**—No one today is more aware of the social need for new housing than the life companies. They know, too, that as the country's largest accumulators of savings (BW—May 22 '48, p89) they have an obligation to the national economy, as well as to their vast army of policyholders. And the sharp drop in the rate of return on investments in recent years has warned the industry that it badly needs to broaden the sources of its income.

Housing projects, however, are only one phase of its activity in the field of

real estate. Since V-J Day, for instance, it has loaned more money on home-building mortgages than all federal, state, and municipal bureaus combined. Through G.I. mortgages alone, homes for at least 500,000 persons have been financed by the insurance companies.

• **New High**—As a result, life insurers' mortgage holdings recently totaled more than \$8.1-billion—a new high. And the companies still have substantial additional funds available for such investments.

Thus, the life insurance industry is convinced that its contribution to housing has gone far enough. Any further steps at this time are too risky.

• **Minimum Yield Required**—Any insurance company investment must promise a definite minimum yield; the amount depends on the safety of the principal. Housing projects must offer reasonable assurance of at least 3½% to 4½% yearly—over and above 2% annual amortization of principal.

A year or two ago, this assurance was present. But it has been evaporating rapidly. Because of today's high costs, much higher rentals than those usually charged must now be assessed to assure the required rate of return. And the life trade doubts that it will be able to



RAILROAD COLONEL

Gustav Metzman, president of New York Central R.R., took time out from his road's annual stockholders' meeting last week to show a model of one of the Central's car purchases to a company shareholder. During the meeting, Metzman reported that his company's deficit for the first four months of 1948 exceeded that of last year—because of severe weather and the coal strike. But he expects full 1948 earnings to top those of 1947. Metzman wears his colonel's "eagles" as Army director of eastern railroads during the period of government seizure (BW—May 15 '48, p. 20).



HOW TO STOP OFFICE NOISE

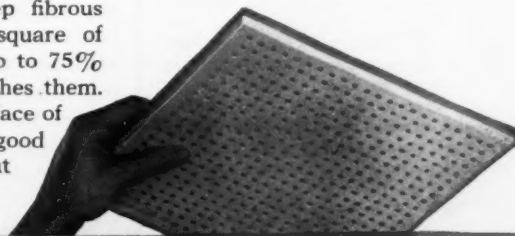
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W-9

maintain such inflated rental levels over the long term.

• **Equitable's Problem**—As a case study, look at one of Equitable Life's housing projects:

This \$10-million development is composed of 11 buildings housing 1,200 families. Planned just before the war, it finally had to be built approximately one-third at a time. One section was completed in 1942, another in 1946, the last in 1947.

• **Rising Rents**—When the first set of buildings was put up, Equitable was able to assure the proper rate of return with a monthly rental of around \$15 a room. But rents for the second group had to be upped to around \$18; and rentals for the last section had to be raised to a \$24 level.

It's true that: (1) Even the \$24 rate can't be matched now in the neighborhood; (2) occupancy of the project has been 100% since its erection; and (3)

there is a long waiting list of would-be tenants.

• **Dark Future**—Nevertheless, three sets of rentals for virtually identical living quarters now prevail in the same project. And this state of affairs does not bode well for the project's future status as an investment.

What will happen when it's no longer hard to find apartments? Certainly the tenants in the \$24 and \$18 apartments will no longer pay such "discriminatory" rates willingly. The result could well be a drop in Equitable's investment return.

• **Pioneer**—First of the life companies to enter the rental-housing field was Metropolitan. Back in 1922-23 it erected in the Queens section of New York City three groups of low-rental apartment houses costing around \$7.4-million.

That project was entered into with the idea that it would earn Metropolitan a profit. But it was also, in effect, a public service performed to relieve a

Utility Profits Lag Behind Revenues

In the current bull market, utility stocks as a group have gone up only 13% so far. That's only half as big a gain as the industrials and rails have made. The utilities' relatively slow rise reflects deep-seated fears of many investors over the nearby trend of the electric industry's earnings.

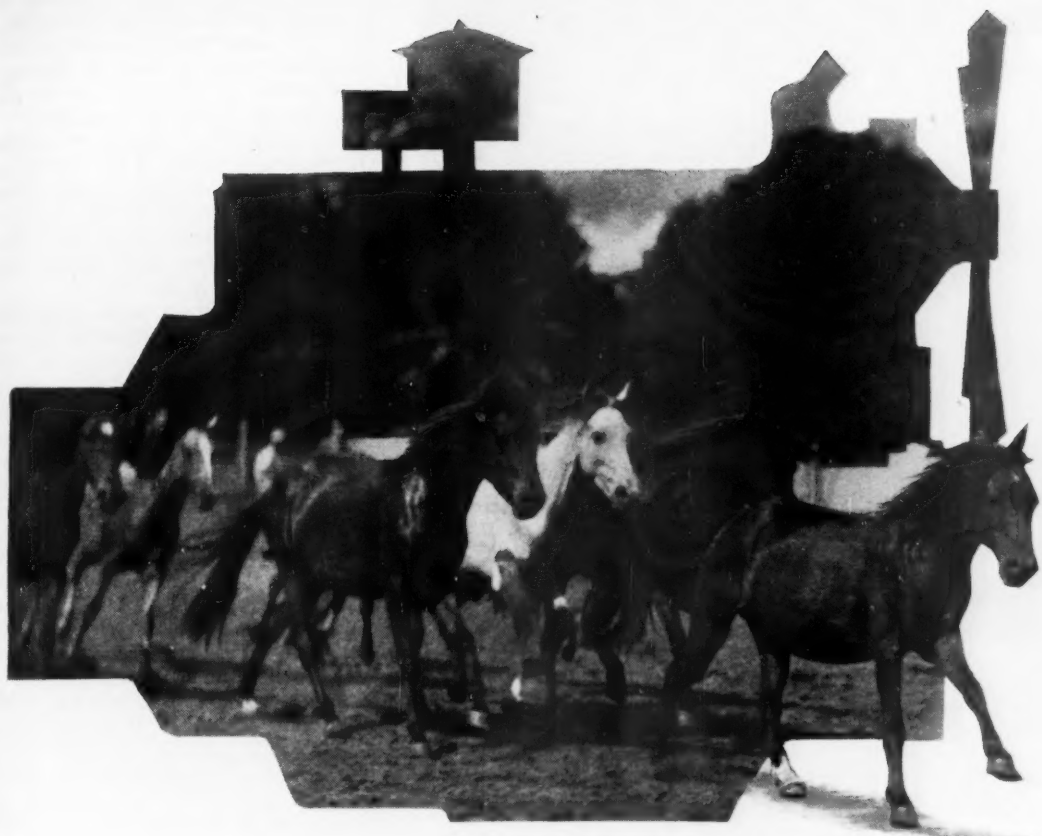
The power companies, unlike a lot of others, aren't in a profit boom—even though power output is climbing up and up to new peaks. Reason: wages and fuel costs, the

principal operating expenses, are rocketing too. Their rise has more than offset sharp gains in revenues and cuts in fixed charges. And regulation makes it hard to raise rates.

In 1947 the utilities' net profit came to less than 17¢ of each \$1 of gross revenues. In 1946, net profit was 19.4¢ of each dollar; in 1939, 24¢. What this adds up to is shown in the sampling below of comparative gross and net income for several utility concerns (figures in thousands of dollars):

	Gross Revenue			Net Income		
	1939	*1947	*1948	1939	*1947	*1948
Arkansas Power & Light....	\$9,687	\$16,693	\$19,841	\$1,256	\$3,028	\$3,136
Birmingham Electric.....	7,773	13,485	14,456	624	1,409	790
Commonwealth Edison.....	145,873	200,837	224,544	25,415	27,127	26,586
Consolidated Edison of N. Y.	251,171	277,686	300,950	36,428	30,217	34,258
Consol. Gas, El. Lt. & Power.	36,585	58,055	65,705	6,805	7,445	6,757
Consumers Power.....	40,507	72,731	81,603	9,675	14,388	14,078
Delaware Power & Light....	5,792	13,935	15,943	1,487	2,247	2,118
Detroit Edison.....	59,610	95,205	110,359	9,640	11,086	10,812
Florida Power & Light.....	15,385	26,554	31,465	1,510	4,253	3,617
Georgia Power.....	31,395	54,180	60,180	4,984	6,784	6,143
Indianapolis Power & Light.	11,828	19,217	21,865	2,211	3,361	3,342
Iowa Public Service.....	4,915	8,282	9,896	686	1,210	1,134
Jersey Central Power & Light	12,400	18,281	20,280	2,235	2,510	2,130
Kansas Power & Light.....	10,350	19,188	21,785	2,502	3,616	3,269
Louisiana Power & Light....	7,645	14,032	16,207	1,047	1,969	1,921
Mississippi Power.....	3,672	6,583	7,481	516	1,461	1,395
Northern States Power.....	37,728	57,130	63,698	5,929	8,199	8,012
Oklahoma Gas & Electric...	13,673	18,680	20,921	2,779	3,727	3,636
Pacific Gas & Electric.....	107,175	171,197	189,932	25,677	24,502	24,535
Pennsylvania Power & Light.	39,258	54,684	60,391	8,775	7,163	7,164
Public Service of N. H.....	6,461	A11,186	A12,478	1,247	A2,158	A1,633
Public Service of N. J.....	133,899	197,214	209,438	25,723	23,278	18,009
So. California Edison.....	46,245	76,504	90,290	12,670	11,066	9,795
So. Carolina Power.....	3,639	8,036	8,632	408	898	731
Wisconsin Public Service....	9,191	14,819	16,658	1,648	2,300	1,707

*12 months ending Mar. 31. A—12 months ending Apr. 30.



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postwar housing shortage—a shortage so severe that for the first time in history, state laws were passed permitting life companies to invest assets in housing. Metropolitan actually embarked on the project at the request of authorities.

This project was planned to assure Metropolitan a return of 6% on its investment after amortization. And it has done just that—despite the rise in operating costs and taxes since 1932 (the project was tax-free until then), and initial rents of only \$9 a room.

• **Parkchester**—Fifteen years after this pioneering project, Metropolitan started its famous Parkchester project in the Bronx (picture, page 81). This occupies 129 acres, only 27% of which are built up; it has 51 buildings of 7 to 13 stories with a total of 12,273 apartments; it represents an investment of around \$50-million. Since its opening in 1941 this project, the largest housing development yet built or planned, has enjoyed 100% occupancy at rentals averaging about \$14 a room, including utilities. So far Metropolitan has earned around 4% annually on its investment, after taxes and amortization.

Since then, Metropolitan has built several other projects. It is now completing three gigantic moderate-rental slum-clearance developments in Manhattan. Together these will represent an investment of \$130-million, on which the company expects a gross return of 6% and a net return of 3½% to 4%. In addition, projects in Los Angeles and San Francisco, containing 5,000 apartments and costing some \$75-million, will be completed this year. When all present projects are finished, says Metropolitan, it will have an investment of over \$300-million in housing, giving shelter to some 130,000 persons.

• **Slum-Clearance**—Prudential Life was the first insurer to enter the slum-clearance field. Back in 1931 it completed a development housing 1,500 people which replaced a large section of one of the most congested—and blighted—sections of its home city, Newark, N. J. This has proved a profitable investment as well as a needed social job. Prudential now realizes close to 4% annually, the Institute of Life Insurance reports.

New York Life is now completing a \$30-million development in Flushing, Long Island. It will be the third largest of all life insurance company housing developments, ranking behind the Metropolitan's two big projects. It will be a community of 10,000 people with its own shopping, theater, and recreational centers.

• **Small-Company Leader**—None of the Big Five, however, is as yet as fully invested in the field of housing as the Bankers' National Life Insurance Co. of Montclair, N. J. That smaller company has more than 3% of its \$23-million of assets in housing projects. It has

specialized in the "village" type of development (picture, page 81).

Two insurance companies have found a way to help out the housing situation, at a profit, without sinking any of their funds in long-term projects. California-Western States Insurance Co. has built 100 houses, and sold them to home seekers. Continental Life Insurance Co. has built and sold 191 homes at a price of \$10,000 each.

Playboy Financing

Stock finally offered to public, under "speculative" label. Proceeds will help company crash automotive field.

The Playboy Motor Car Corp. (BW—Dec. 6 '47, p44), dream-child of used-car dealer Lou Horwitz, is at last taking on solid shape. It has reached the point where it can seek from the general public the cash it needs to crash the highly competitive automotive field.

• **On Sale**—Last week the Securities & Exchange Commission allowed the Playboy stock registration statement to become effective. It was originally filed last February. And since last Thursday, Tellier & Co., underwriting house, has been offering 20-million shares of common for public subscription. Price: \$1 each.

Before SEC released the new shares, it required several amendments that ma-



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The National Provincial Bank of Great Britain is taking its offices to its customers. This cashier's-cage-in-a-trailer will soon be touring the British countryside so that farmers can make their deposits on the spot—thus save precious petrol for other trips.



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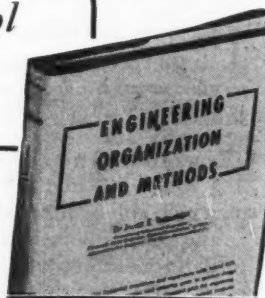
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terially amplified the company's original prospectus. SEC required, too, that the offering be labeled "speculative."

Tellier & Co. is selling the new stock merely as an agent for Playboy on a "when, as, and if issued" basis. And if the company's net proceeds from the sale do not reach \$8.5-million, no sales of stock will be consummated, and the transaction will be called off.

Playboy is issuing the stock for the first two installments on the plant at Tonawanda, N. Y., that it is buying from the War Assets Administration: to rearrange and recondition the plant; for equipment, and for working capital.

• **Production**—Once Horwitz had hoped that his car would be in quantity production by May 1947. Actual output so far: some 40 pilot cars for tests and displays. For a time, when the plant gets going, the company plans to make only one model—a 4-cylinder, 3-passenger 2-door, 1-seat, convertible coupe with a 90-in. wheel base; weight will be a bit over 2,000 lb. The car will sell "in the \$1,000 class;" earlier Horwitz had hoped to sell it at around \$950 f. o. b. Buffalo.

When, as, and if the new plant is set up, it will be geared to an annual production of 100,000 cars, on a one-shift basis. It will be doing mostly an assembly job since over 70% of the car—including engine, engine accessories, clutch, transmission and other parts—will be bought from outside suppliers. Playboy itself will make only the basic body and frame, bumpers, doors, trim, gas tank, and the like, according to current plans.

• **Distribution**—Up to recently the Playboy company had granted some 220 franchises to dealers and about 15 to distributors. Before it's through, it hopes to sell 800 to 900 dealer franchises.

GOOD FISHING

Treasure recovered from the floor of the sea by ship salvagers isn't always confined to what went down. Fireman's Fund Insurance Co. of San Francisco, chief underwriter in a recent sinking, made a big haul in institutional promotion from its salvage work.

Last summer, the merchant ship Diamond Knot sank in Puget Sound with \$3.5-million of canned salmon in its hold. Close to 100,000 cases, worth upwards of \$2-million, were siphoned through holes cut in the side of the vessel (BW-Oct. 11 '47, p47).

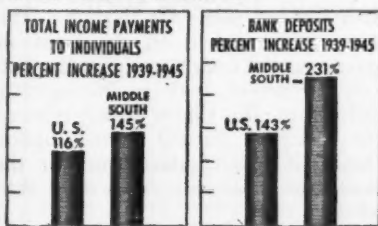
Sensing the drama—and the publicity value—in this battle against the sea, Fireman's Fund recorded the salvage operation on still and motion-picture film. The results: a 32-page booklet in color, and a 30-min. sound movie. The company is circulating them among marine insurance people on the Pacific Coast.

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War-time industries proved the values to be found in Arkansas, Louisiana, and Mississippi. Rich raw resources. Low-cost transportation. Intelligent, loyal workers—97% of them native-born. Industry taught our people new skills. Now peace-time industries, rapidly expanding, make use of those skills and keep individual income high. Actually, individual income in the Middle South has been growing faster than the nation's as a whole.

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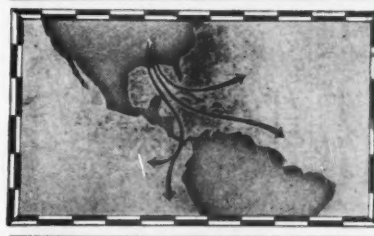
- 54% OF U.S. RICE
- 10% OF U.S. SALT
- 25% OF U.S. SWEET POTATOES
- 74% OF U.S. SUGAR CANE
- 34% OF U.S. COTTON SEED
- 70% OF U.S. TUNG NUTS
- 36% OF U.S. BARITE
- 93% OF U.S. BAUXITE
- 10% OF U.S. CRUDE PETROLEUM
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- NEW ORLEANS PUBLIC SERVICE INC.**
New Orleans 9, La.



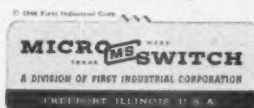
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THE MARKETS

How Commodity Prices Stand Now

PRIMARY SPOT MARKET	January High	Feb.-May Low	This Week	% Loss Recovered
Butter, lb.	\$.888	\$.741	\$.799	39.5%
Cocoa beans, lb. ....	.460	.312	.380	45.9
Coffee, lb. ....	.270	.260	.270	100.0
Copper, lb. ....	.214	.214	.214	....
Corn, bu.	2.808	1.975	2.360	46.2
Cotton, lb. ....	.359	.314	.378	142.2
Cottonseed oil, lb. ....	.320	.327	.350	132.3
Hides, lb. ....	.325	.232	.290	62.4
Hogs, 100 lb.	28.950	20.875	24.500	44.9
Lard, lb. ....	.290	.208	.233	30.5
Print cloth, yd. ....	.282	.190	.190	none
Rosin, 100 lb.	8.950	6.760	7.460	32.0
Rubber, lb. ....	.230	.195	.228	94.3
Steel scrap, ton.	39.500	38.250	39.250	80.0
Steers, 100 lb.	32.250	26.500	32.750	108.7
Sugar, lb. ....	.063	.050	.052	15.4
Tallow, lb. ....	.278	.128	.132	2.7
Wheat, bu.	3.065	2.295	2.325	3.9

Spot Prices Get Jumbled

Strange spreads develop as rallies reduce February losses. Corn tops wheat so farmers are selling porkers to save feed. That—plus strong cotton—upsets lard-cottonseed oil ratio.

While Wall Street is trying to decide whether its new bull market in stocks is a boom or a booby trap, it might pay a businessman to take a good look at what has been happening in commodities.

Prices generally have been firming up lately. A number of spot commodities now have erased all or most of their February losses.

These price movements have been highly selective, though (table above);

as a result, there have been some drastic changes in the differentials between prices of related commodities.

• **Corn-Wheat Mixup**—Corn, which led the break in the grain market, has now recovered almost half its loss. Wheat has come back less than 4%.

This is a clear case of statistics finally catching up with the market. The thing that touched off the break in grains was the improvement in the outlook for wheat, both in this country and abroad. But this in no way relieved the pinch in current corn supplies. Hence, it didn't make sense for the market to knock corn down more than wheat.

Recent price changes have straightened out this inconsistency. But in the process, they have created a new anomaly. Spot corn now sells for about \$2.36 a bu. Spot wheat is going in the neighborhood of \$2.32. Thus, corn, which is principally an animal feed, costs more than wheat, a staple in human diet.

• **Hogs Hit**—With pigs eating more expensively than their masters, many farm-

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	165.0	162.5	153.0	141.7
Railroad	50.8	51.0	48.5	39.1
Utility	73.5	73.4	69.8	72.0
Bonds				
Industrial	120.5	120.6	120.3	123.1
Railroad	108.1	107.9	106.8	107.0
Utility	118.1	118.6	118.7	112.6

Data: Standard & Poor's Corp.

ers are reluctant to keep on feeding the porkers. This is one of the main reasons for the heavy run of hogs to market since the end of the packinghouse strike. And the big marketings help explain why the price of hogs has recovered only 45% of its loss at a time when steer prices have topped all previous highs.

• **Cottonseed Oil vs. Lard**—Heavy slaughter of hogs also has played a part in upsetting the relation between the price of lard and the price of cottonseed oil. These two commodities are highly competitive. In ordinary times lard sells only a couple of cents under cottonseed oil.

But since February, lard has recovered only 30% of its loss. Cottonseed oil, carried along by the rapid rise in the cotton market, has wiped out all its loss and topped the January high by 3¢. This opens up a gap of almost 12¢ between the two competing commodities.

• **Cotton-Print Cloth Tangle**—The list of contradictions doesn't end there. Take cotton prices and print cloth, for instance. Cotton has been the star performer in commodity markets this spring. It dipped only slightly in the big break and then came back fast. It now is selling around 38¢ a lb. against 36¢ in January. All the while, print cloth—the same cotton in fabricated form—has been slipping downward. The 64x60 construction was 28¢ a yard in January. Now it's down to 19¢, with no signs of strengthening.

• **Confused Picture**—Most markets develop inconsistencies during a major spill and then straighten them out in the period of consolidation that follows. This market seems to be reversing the process. The longer it takes in making adjustments the more balled up it gets.

New Securities Find Market

Trading in listed markets has given a nice lift to new issues. Not, however, that new flotations have picked up in popularity like the rejuvenated stock market; volume in May was 23% below a year ago and only 41% of the same month in 1946.

• **Looking Up**—Still, Wall Street is taking heart from investors' greater receptivity to new issues. Institutional buyers, such as insurance companies, no longer shy away from one new bond offering after another. (Earlier this year it was always: "Go on; they're overpriced.") Blocks of new issues also are finding their way into bank portfolios again.

One encouraging sign: Prices often move up to better levels than those at which the underwriters offered the securities (box).

• **Still Cautious**—But caution isn't being thrown to the winds. Investors are watching price; so are underwriters when they bid for new business.

What the market wants most still is high-grade issues. Favored, too, are fixed-interest obligations maturing in 20 years or less. Stock issues have been relatively few, with better-grade preferreds getting most of the play.

• **Commons Are Coming**—Nevertheless, stock flotations in May rose to the highest total since July, 1947. And there are signs that some new common stock issues are being readied for sale. The Securities & Exchange Commission has received more inquiries about this type than at any time since last fall.

Even so, borrowers need not look for really "cheap" money. Preferred stocks need 4% to 5% yields to attract investors—and sometimes a conversion privilege to boot.

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How Recent New Issues Have Acted

Amount of Offering		Initial Offering		Current Market	
(In Millions)	BONDS	Price	Yield	Price	Yield
\$10	Bristol-Myers Co 3s, 1968.....	\$100.50	2.97%	\$102.25	2.84%
45	Columbia Gas & Elec. *'s, 1973...	101.25	3.18	101.87	3.14
30	Cons. Nat. Gas 2½s, 1968.....	100.75	2.70	101.00	2.66
12	Gulf States Utilities 3s, 1978.....	101.75	2.91	102.00	2.90
25	Mountain States T. & T. 3½, 1978.	100.87	3.08	103.00	2.96
30	Nat'l Dairy Products 3s, 1970....	102.00	2.88	102.87	2.82
40	Ohio Power 3s, 1978.....	100.99	2.95	101.62	2.91
100	Southwest Bell Tel. 3½s, 1983....	102.50	3.01	104.50	2.91
25	Swift & Co. 2½s, 1973.....	100.00	2.88	100.50	2.84
14	Wisconsin Michigan Pow. 3s, 1978.	100.87	2.96	101.37	2.92
(Thousands of Shares)	STOCKS	Price	Yield	Price	Yield
13	Alleghany-Ludlum Steel \$4.50 pfd.	\$103.00*	4.37%	\$108.00	4.17%
65	Oklahoma Gas & Elec. 5¼% pfd..	104.00	5.05	105.25	4.99
100	Pet Milk Co. 4½% pfd.....	100.00	4.50	102.25	4.40
200	Solvay American Corp. 4% pfd....	100.00	4.00	101.12	3.95
800	Southern Calif. Edison 4.56% pfd.	26.25	4.34	28.00	4.08

* Public offering price of unsubscribed portion of offering to stockholders.

5,000,000 Youngsters Need Our Help Now

THE BUMPER WARTIME crop of babies, about 5,000,000 larger than the population experts expected, is reaching school age.

At school these youngsters should find a good education awaiting them. That is their most cherished American birthright.

But unless something is done quickly, millions of these children will be cheated. They will crowd into classrooms already run on double shifts. They will move in with children who are now sitting two in a single seat. They will read germ-loaded books mangled by a generation of use by grimy hands.

I

So the continuing crisis in American education is given a new twist by unexpected pressure on school plant and equipment.

The U.S. birthrate has jumped by leaps and bounds. Instead of declining in the '40s, as the experts expected it would, the rate climbed from 17.9 per thousand in 1940 to 21.5 in 1943. It jumped to 25.9 in 1947, an increase of 45 percent since 1940. Result — by 1956 elementary school attendance in the United States is expected to jump from 18,200,000 to more than 23,400,000, an increase of about 5,200,000, or more than one-fourth.

The rush has already begun. It will pick up speed next fall.

Now, while this pressure has been building up, our public schools and their equipment have been running down — first through inevitable wartime neglect, then because inflation and material and labor shortages made it difficult to catch up.

If we are to give this bumper crop of youngsters

the break they deserve — and reach the educational standards the nation needs — we must speedily do a major job of educational rehabilitation and expansion.

II

Some headway has been made in overcoming the teachers' salary crisis.

Teachers' salaries are improving. Pay problems were driving good teachers away from their posts in droves not long ago. But in the year since the 57th editorial in this series emphasized that crisis, the average teacher's annual salary has increased about \$300 — from \$2250 to \$2550.

True, increases vary enormously from state to state and from town to town. In a few states the average increase has been \$500; in some less than \$100. But, for the nation as a whole, last year's increase put teachers about even in the race with the cost of living. After taxes, their salaries have risen 68%, and the cost of living 67%, since 1939. In terms of pay increases, however, they are not nearly as well off as are industrial workers, whose average weekly wages after taxes have risen 108% since 1939. They are far behind farmers, whose net income is now four times what it was in 1939. And teachers had notoriously low salaries to start with.

A great deal more needs to be done in raising salary standards to put our school system on a firm footing. There are still about 100,000 teachers, nearly 12% of all public school teachers, who hold temporary or emergency credentials. They cannot meet prevailing standards, and not very severe standards at that, for persons holding their posts.

The salary crisis, however, is easing.

III

But now comes the new crisis in school buildings and equipment.

We would have been hard put to get our schools back into shape after years of wartime neglect — even without a booming birthrate complicating the problem. Right now, 85% of all public school buildings need major remodeling to remove health and safety hazards.

And we aren't building enough new schools to keep up with current needs, to say nothing of catching up on those we were not able to build during the war years. School construction expenditures for 1948 are estimated at \$375 million — which is less than what was spent in 1939. With building costs twice as high as they were in 1939, that means we aren't even holding our own — we are falling further behind.

And now comes the rush of war babies.

IV

We must spend at least \$11 billion on new schools and equipment in the next decade.

Public and elementary schools must have \$6.6 billion. Equally important, another \$4.4 billion must be invested in buildings and equipment in our private schools, colleges and universities if they are to meet the demands which will be made upon them. The private school and the privately endowed university are doing their full share and doing it well. The need for them is increasing.

These figures cover only rockbottom needs for educational plant and equipment. But statistics are a very restricted recorder of this crisis.

You can see it better, I'm sure, in schools not very far from your home. There are schools with leaking roofs and outdoor toilets in our greatest cities. There are schools where students still use histories and geographies copyrighted before 1920 — books with no mention of World War I, the depression of the 1930's, the Russian Revolution or the rise of dictators. There are

countless schools where modern methods of visual education are completely unknown.

All of these conditions promise to get worse — promptly — as that scheduled 5 million increase in the school population gets rolling.

V

The Metropolitan Life Insurance Company does not indulge in lurid prose. It says after painstaking study of the educational crisis that:

"Unless definite measures are taken immediately . . . large numbers of American boys and girls will be deprived of an adequate education."

Currently we are deeply concerned about our military defenses. We are taking, and I think rightly, emergency measures to strengthen them. But we must regard our schools as a part of our national defense as vital as are our armed forces. This is particularly true in these times of fifth columns and ideological warfare.

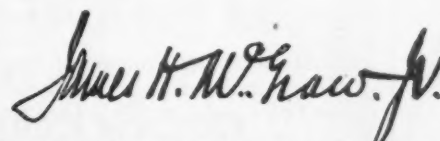
If we are wise, we will raise our sights. We will give the continuing crisis in education the same urgent attention being given the more obvious but no more real crisis in national defense.

Go to the school house in your neighborhood and discover what needs to be done to provide for the rising tide of young Americans. Ask your school board and your school administrators and teachers how you can help them.

That is good citizenship.

That is patriotism.

That is our duty to the oncoming generation.



President, McGraw-Hill Publishing Company, Inc.

LABOR

Who'll Settle Next?

Chrysler's 13¢ wage increase, in wake of G.M. settlement, opens door wide to further pay revisions. As anti-raise front cracks, big question is what steel and electrical manufacturing will do.

When C.I.O.'s United Auto Workers O.K.'d a new wage pact with Chrysler Corp. this week, two facts were established:

(1) The General Motors formula which links wages and living costs (page 98) broke the back of a united management resistance to 1948 pay boosts.

(2) G.M. didn't devise the only formula possible for settling big employers' third-round wage problems.

• **Chrysler Terms**—Chrysler's 75,000 U.A.W. employees ended a 17-day strike by accepting a flat 13¢ increase in hourly pay. This raise—2¢ more than the immediate 11¢ increase won by G.M. unionists—wasn't tied in any way to living-cost statistics. The only way it can be changed—upward or downward—before Aug. 1, 1950, is through collective bargaining; company and union can reopen the wage clause one time each. If they don't reach agreement on new wage schedules, the contract expires.

The Chrysler terms are a flat rejection of the G.M.-U.A.W. "escalator" agreement. Chrysler locals supported a demand for a contract that wouldn't "make workers slaves to statistics." The position of U.A.W.'s left wing was that a living-cost pact violates "a basic trade union principle . . . of not agreeing to cut wages."

• **Ford Next**—With two of three major contracts settled in the automotive industry, Ford Motor Co.'s proposal to cut wages became the target for all U.A.W. Union committeemen will demand, when the Ford meetings start June 14, that the company meet Chrysler's 13¢ raise.

• **Big Question**—The break in the automotive front makes this question the biggest one today: What will happen in electrical manufacturing and steel industries now?

G.M.'s third-round formula was accepted by the company's 40,000 electrical workers—represented by C.I.O.'s

United Electrical, Radio & Machine Workers. In common with others on the left, U.E. didn't like the tieup to Bureau of Labor Statistics figures. But there wasn't much choice if U.E. wanted to dodge a picket-line fight.

The G.M. settlement seriously battered the General Electric and Westinghouse "no-pay-increase" position. Lemuel R. Boulware, G.E.'s vice-president in charge of labor relations, had been standing firm; he has resumed contract talks with U.E.

Westinghouse was also forced to reconsider its forward position against wage increases.

• **G.E.'s Stand**—G.E. has been the most outspoken exponent this year of a theory that a third-round raise should be avoided as inflationary. Boulware announced last week that G.E. was ready to "take another look" at its 1948 wage policy.

The reason: G.E. matches the "going rate" of wages in the 125 cities and towns where it has plants; the G.M. settlement will effect the industrial wage levels in many of those cities.

Boulware is convinced that the G.M. formula would have "doubtful application" in the G.E.-U.E. relationship.

As far as U.E. is concerned, G.E. doesn't have to bargain on a G.M. pattern—but the union expects the company to wind up with about the same cents-an-hour settlement.

• **Westinghouse Moves**—Westinghouse took the initiative this week by offering employees a broad social security pro-

Local's No-Strike Vote Upsets U. A. W. Tradition

The interest in General Motors' wage settlement (BW—May 29/48, p96) has tended to overshadow something else that happened at G.M. In the long run, this less-publicized development may prove to be of more significance than the wage pact itself.

A fortnight ago—for perhaps the first time since the C.I.O. was organized—a large and strategic local union refused to O.K. a walkout to back up its negotiators. Since then, Business Week has been probing into the reason the Buick local of the United Auto Workers, with 15,500 members, voted 2-to-1 against a strike.

• **No Talking Point**—Besides setting a precedent, this action was notable on several other counts.

(1) It was not a matter of finding a company proposal satisfactory: Buick Local 599 had no offer from the employer.

(2) Local 599 does not have the reputation of being more peaceful-minded than the average U.A.W. local. On its record, it is just about as militant as any other.

(3) Factionalism—which explains much that happens in U.A.W.—does not account for Local 599's decision. Although 599 is a strongly anti-Reuther local but not under Communist domination, its rebellion does not appear to be a factional move.

• **Fed Up**—Local 599 is Case Study No. 1 of a group of organized wage earners who are fed up on striking—

and who have so expressed themselves. They registered their sentiments at the end of a noisy meeting at which Emil Mazey, U.A.W. secretary-treasurer, was often heckled by such cries as "We can't afford to strike."

The overriding consideration was the fact that two years ago the Buick employees were unemployed for 113 days in the long G.M. strike. They simply weren't providing any blank check for that to happen again. And in U.A.W., rank-and-file expression is still free enough to permit such independence.

• **"Stab in Back"**—It can be expected that U.A.W. will move quickly to mend the chink in its armor at Buick. Top-level officials in both the U.A.W. and the United Electrical, Radio, & Machine Workers (C.I.O.)—which got the same deal from G.M.—freely characterize the Buick vote as a "stab in the back." They are convinced that a better settlement would have resulted from a solid union front authorizing a walkout. The U.A.W. leadership is saying: "We have an educational job to do up at Flint" (home of Local 599). Whether that's a polite way of saying tighter control of the membership remains to be seen.

Now, one swallow doesn't make a summer. But it's clear that an important body of experienced unionists has had enough of strikes. That's something which neither unions nor employers can afford to overlook.

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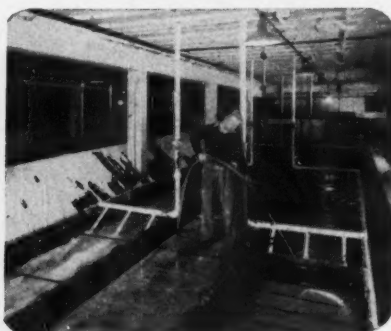
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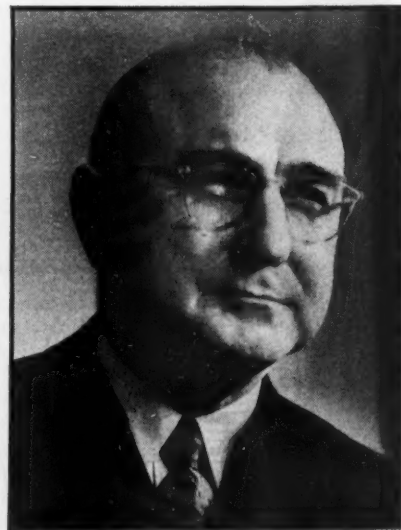
gram—apparently hoping to take some of the heat off the 1948 wage issue.

It offered plans for pensions and for insurance covering death, sickness, accidents, surgical costs, and hospitalization. The program would be paid for jointly by Westinghouse and its employees—with the company share amounting to 6¢ to 8¢ an hour for each of 106,000 employees.

• **Big Steel, Too**—U. S. Steel Corp. was also left in an exposed position after G.M. and Chrysler settlements. It, too, is preparing to offset refusal to bargain on wages with willingness to bargain on a social security plan. Philip Murray's United Steelworkers of America has asked the company for a 9¢-an-hour social security program; the company has offered one costing about 2½¢ an hour for each of its employees. Negotiations on these social security plans are scheduled to begin next week. Wages aren't supposed to be brought up, since the company hasn't any legal obligation to talk about wage terms with the union again until April, 1949.

But labor observers in Pittsburgh aren't sure that wages won't be considered unofficially. When U. S. Steel flatly rejected a third-round boost, it announced that if prices weren't checked "then in fairness to our employees and to our stockholders we will have to consider at some later date the adequacy of both wages and steel prices." That could be the way out if Big Steel finds its position untenable.

• **Other Industries**—For most wage negotiators who came to agreements after the G.M. and Chrysler settlements, the cents-an-hour range of the pacemakers seemed more important than the formulas. The followers were closing at around 12¢-except for the eastern carpet and rug makers, who signed up with the C.I.O. textile workers for 13½¢.



G.E. NEGOTIATOR Lemuel Boulware is taking "another look" at 1948 wage policy

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PRESIDENT C. E. Wilson of G.M. conceived the cost-of-living wage

G.M. Boss Passes Wage Idea...

General Motors Corp.'s trail-blazing wage formula was no sudden improvisation. The idea of tying an automatic wage adjustment to the cost of living had been simmering quietly on the executive floors of the G.M. building in Detroit long before it was proposed.

• **Wilson's Idea**—It originated with the president of General Motors, Charles E. Wilson, last year. It seemed to him to have two big attributes: fairness and flexibility.

On fairness, he thought: If workers' wages rose and fell in proportion to living costs there would be no cause for workers' complaints that grocery bills were getting ahead of them.

On flexibility, he concluded: Every company's position could vary under such a plan. Companies whose wage rates had gone up more in proportion than G.M.'s during the war years would not be liable for as much cost-of-living advance as G.M., if they followed the formula. Some might add fringe benefits; others would not.

In ironing out the final details, G.M. made the formula even more flexible: It added the 3¢ "living standard" advance for the first year of the deal, with an added 3¢ effective next year. Individual companies that may want to follow the G.M. approach can bargain for different amounts at this point—or nothing at all. Varying settlements will deal a severe blow to the pattern idea, which Wilson deprecates.

• **Germination**—Wilson did not immediately discuss his plan. He let it mature in his mind for several months, then talked about it casually.

Meanwhile, negotiations with U.A.W. were starting. The auto union came in with 132 contract change proposals. As each was presented, the company worked out detailed studies and answers. No firm commitments were made by either side on any point.

About a month ago the time seemed ripe to introduce the Wilson idea. He called in Harry W. Anderson, company vice-president on personnel, and discussed it with him. Anderson thought about it, then registered approval; he saw the proposal as probably "salable" to the union, and then by the union to its members.

• **Fresh Minds**—But study was required to find out whether the execution of the idea was possible and practical cost-wise. Anderson summoned Lou Seaton, company director of labor relations. Seaton and Anderson brought out their pencils. At that time they came up with 6¢ for a cost-of-living increase, added 3¢ as a reasonable "living standard" advance. The question was whether a 9¢ package could be sold to the union, with 6¢ of it on an escalator basis.

Corporation economists came into the discussions. They had varying opinions. Efforts were made to punch holes in the concept, but rebuttals were at hand for the objections. Possible union reactions were canvassed. At this point, Seaton's thinking was joined by that of two major contract clause writers and negotiating assistants, H. T. Gierok and Earl R. Bramblett.

• **Bombshell**—Meanwhile, bargaining was not making much progress. As in all major negotiations, no decision was



VICE-PRESIDENT Anderson packaged it



NEGOTIATOR Lou Seaton sold it to union

... To Personnel Executives

final by itself—each hinged on all others. Without a wage settlement the key-stone of the structure was missing.

On May 21, in the 38th general bargaining session, General Motors introduced its cost-of-living concept. But the details were not presented—only a five-page statement, partly written by Wilson. This was the gist of this message:

(1) Time is running out; the negotiators have "about the last chance" to reach a realistic agreement which might prevent another national round of strikes.

(2) The union's problem is to maintain purchasing power in terms of hours of work, and to be able to assure workers that their buying power will increase.

(3) To solve these problems, G.M. proposes to re-establish the buying power of an hour of work, protect it, improve it, and stabilize it over a considerable period.

• **Union Accepts**—No figures were offered to buttress this brief. Company people simply asked the union bargainers to "sleep on it over night." If they approved its concept, figures would be brought out.

Next day, the union negotiators said they wanted to hear more. The figures were presented. Interestingly enough, the April living-cost index of the Bureau of Labor Statistics had just come out; it automatically added 2¢ to the G.M. package.

The union people had objections, mostly minor. They held out for a guaranteed 6¢ advance, instead of 3¢, because 6¢ had already been offered by Chrysler to its striking locals. General

Motors then agreed that 3¢ of the 8¢ cost-of-living money would be permanent, regardless of any index declines.

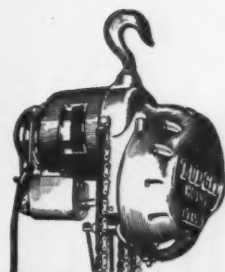
• **Sweating It Out**—Meanwhile, the entire package of demands and counter-proposals was being balanced and shaken down. Along with its 11¢ offer, G.M. had made stipulations on the contract itself. The wage proposal was attractive enough for the union to waive most of its bargaining demands—the union shop, negotiations on pensions and insurance, steward systems, etc. A two-year term for the contract was decided, fulfilling the fourth G.M. plank of stabilization for a lengthy term.

The areas of agreement were at least defined. Subcommittees began to write the contract language. President Wilson joined subordinates wrestling with language and ideas.

The job took all night. At 6:25 on the morning of May 25 the deal was signed.

• **Trend?**—General Motors has initiated labor trends in the past. A year ago it approved the idea of paying hourly employees for holidays which normally would have been worked, thus compensating them for lost time which salaried employees were paid for. This time it came through with a move of high significance. Its hope: that better relationships with labor will result, that the nation's bargaining road will be smoothed.

Though the idea is still so new that it may not have immediate acceptance in many other managements, G.M. is betting blue chips that eventually it will be.



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CHECKING ON T-H

The left and right on Taft-Hartley law interpretation—NLRB chairman Paul Herzog and Sen. Joseph Ball—were face to face this week before the joint congressional "watchdog" committee. Under Ball's chairmanship, the committee wanted Herzog to explain a number of controversial NLRB decisions. The threefold purpose of the hearings: (1) to check on the board's administration of the law; (2) to consider the wisdom of amending the act; (3) to gather material for a congressional report which is due next Jan. 2. It looks now as though there won't be any Taft-Hartley changes before then.

Overtime Pay During War Still Unsettled

Although the war has been over for nearly three years, there has as yet been no final court answer to two big wartime labor questions:

(1) Were workers in government-owned plants—which operated under cost-plus contracts—employees of the government or of private contractors?

(2) Were the munitions they made "goods" produced for "commerce"—in the definition of the Fair Labor Standards Act?

• **Overtime or Not?**—If the workers were government employees, they weren't entitled to overtime pay at premium rates for more than 40 hours' work in a week. If they were employees of private contractors—and if the goods they produced were for "commerce"—then they were due to set premium pay for overtime.

About 250 overtime-pay suits are pending in courts, awaiting an answer to these questions. They involve "hundreds of millions of dollars," according to the Justice Dept. Recently, the department tried unsuccessfully to get a Supreme Court decision in one case (involving Silas Mason Co., of Linden,



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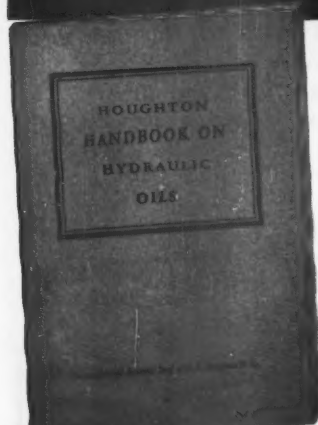
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La.). The high court refused (8-to-1) to docket the test case without having the issues clarified in a lower court review.

• **One Settled**—Meanwhile, one case was cleared up out of court. The International Assn. of Machinists got a \$300,000 settlement of back overtime claims against Continental Air Lines, Inc. Continental operated a wartime modification center in Denver, as a subcontractor for Boeing. The latter had a cost-plus contract with the War Dept. to modify Army bombers.

Continental contended that its employees were covered by the Railway Labor Act (which calls for overtime after 48 hours). The War Dept. backed this stand. The International Assn. of Machinists argued that Continental workers in the modification center weren't really airline employees. Therefore, they should be paid overtime rates after 40 hours a week. The union finally won its point after a three-year fight.

• **Government Pays**—Private contractors don't stand to lose by the overtime decisions. The War Dept. must foot the bill after cost-plus contract bookkeeping.

UNION HELPS BOSSES

The question which the North Adams, Mass., Shoe Workers Union (Ind.) had to answer was a blunt one: Should we take paid vacations in 1948, or should the plant buy new machinery to insure that it stay in business? Union officials put it to their 300 members after some sobering talks with the Gale Shoe Co. management.

Those talks had brought out this fact: Gale's machinery just isn't the right type to turn out women's shoes in the styles now in vogue. If the plant shut down, it might stay down indefinitely—unless the company could find a way to tap this new line of business.

Whether or not the company was open for business, its union employees had about \$25,000 in paid-vacation funds coming to them. The union leaders proposed this to management: Workers would waive paid-vacation checks if the company would agree to put the money into new machinery and then get back into operation as quickly as possible. The Gale management agreed with this proposition. So did union members at their meeting. The favorable decision was reached by a vote of 200 to 28, with the others abstaining.

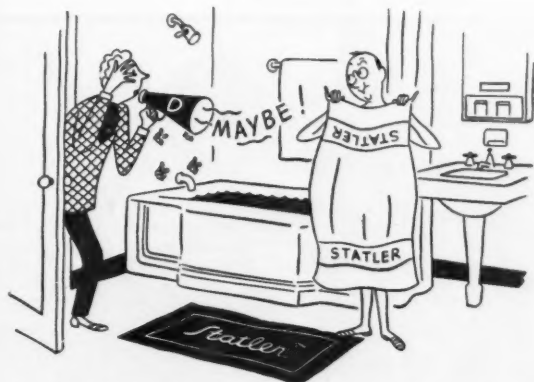
The Pictures—Acme—32, 34, 83, 100; British Combine—87, 110; Int. News—104; (Copyright) Karsh—96; Sovfoto—109; Standard Oil Co. (N. J.)—19 (right); Wide World—25, 98.



1. Dashing Dave, Director,—his “yes-man” close behind—dashed into town from Hollywood, and said: “I know I’ll find a warm and friendly welcome at a place we both can rest; and *that’s* the Hotel Statler, where you really *are* a guest.



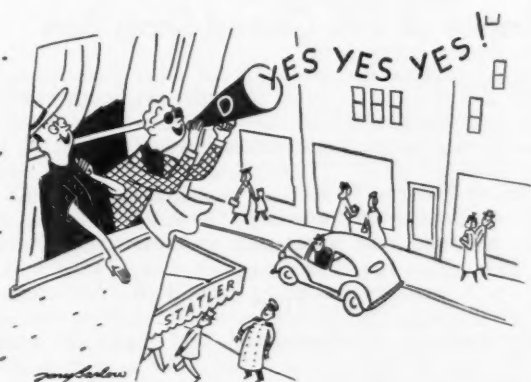
2. “In all the bedroom scenes I’ve shot, I’ve not seen beds like this: eight hundred built-in springs and more insure a slumbrous bliss. Can you imagine better beds, no matter where we go?” asked Dashing Dave. And then—surprise—the “yes-man” answered: “*NO!*”



3. “Or take the Statler bathroom,” declaimed Director Dave. “Of water hot, of towels white, and extra soap I rave. Why, when I finish bathing I’m as sweet as any baby.” The “yes-man” took a look at Dave, and glumly mumbled: “*Maybe.*”



4. “If ‘oscars’ were passed out for meals the Statler’d be the winner. That’s why,” said Dave, “I’m first in line for breakfast, lunch, and dinner. The genius of the Statler chefs, beneath their tall white caps, is almost equal to my own.” The “yes-man” groaned: “*Perhaps.*”



5. “The theaters where my pictures play, the city’s smartest stores, the business districts, too,” said Dave, “are close to Statler’s doors. And soon there’ll be a Statler in Los Angeles, no less! Won’t *that* be swell?” The “yes-man” grinned, and shouted: “*Yes, Yes, YES!*”



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Open-Shop Signs in New Jersey Set Off . . .



. . . Union Defiance of T-H Closed-Shop Ban

Closed-shop contracts are traditional in the construction field. But the Taft-Hartley law bars them. For a year a big question has been: Can a boss adopt an open-shop policy in the building trades?

• **Test**—Last week Fairmount Construction Co., in Newark, N. J., decided to see. It announced that it would run an open shop (hiring both union and nonunion workers) on a \$10-million housing project. The big reason was a 40¢ jump in hourly wages ordered by building-trades unions for the Newark area. The company said the boost would lift the cost of 200 housing units by about \$1,200 each.

The company fired its 300 union bricklayers, carpenters, and laborers. It offered to rehire them on open-shop

terms. Some other conditions: Work would be under old hourly rates, without the 40¢ increase; an 8-hour day, 40-hour week would replace the former 7-hour day and 35-hour week; "feather-bedding" practices would be out.

• **Result**—The A.F.L. unionists turned down jobs on those terms. Fairmount foremen pitched in to keep work from stopping completely. Ads recruited a handful of skilled workers; several score semiskilled and unskilled applicants showed up. Still, work bogged down even before picket lines were set up.

As New Jersey mediators sought a solution, one thing—which may have general application—was obvious: Staffing this major building project would not be easy—T-H law or no T-H law.

INTERNATIONAL OUTLOOK

BUSINESS WEEK

JUNE 5, 1948



The U. S. is frantically trying to save the sterling area.

The Economic Cooperation Administration is digging into the problems.

Unless Paul Hoffman can come up with an answer soon, London will have to: (1) pass some of its ECA dollars on to other sterling area countries, or (2) let the sterling area gradually fall apart.

Here's the problem in a nutshell: London acts as dollar banker for a group of countries whose money is tied to the pound. Included in the area: British colonies and protectorates, the Dominions (except Canada), Eire, India, Pakistan, Iceland, Burma, Iraq.

Since the war the sterling area hasn't earned enough dollars to match its dollar purchases. So London has had to pass out the difference. (More than \$1-billion of the \$3.75-billion U. S. loan was used this way.) The drain still goes on. Washington estimates that the net loss for the next year will be at least \$300-million.

London could take this money out of its \$1.3-billion slice of ECA funds. But Washington doesn't like that idea. For one thing, it would delay British recovery. For another, European countries would gripe that ECA funds were being used to save the British financial system.

U. S. policy makers are toying with a combination of these ideas:

(1) An Export-Import Bank loan of up to \$300-million.

(2) Use of the International Monetary Fund to exchange sterling area currencies for dollars.

(3) ECA offshore purchases in dollar-shy places like Australia and New Zealand.

The fate of western Germany is growing clearer.

The U. S., Britain, France, Belgium, Netherlands, Luxembourg have agreed to:

(1) Convene a west German constituent assembly Sept. 1 to draw up a constitution.

(2) Allocate the Ruhr's coal, coke, and steel via a seven-power authority (Germany is the seventh country).

(3) Keep troops in the Ruhr and Rhineland even after a full-scale military occupation ends.

The six governments still have to approve the agreement, of course. And there's some doubt about how France will behave.

Premier Schuman and Foreign Minister Bidault aren't sure they can carry the French assembly with them.

They say the U. S. refusal to go ahead with arms for western Europe is weakening their position. They're already facing Communist and de Gaullist opposition over Germany. They figure a guarantee of American arms would prove they could meet any eventuality.

That's why Bidault has been asking—without success—for an invitation to visit Washington and talk over "domestic politics."

Washington isn't planning to put out the welcome mat. With the Soviet peace offensive under way, the State Dept. doesn't want to pass out a lot of war stuff.

Bizonia's exports hit a new high in April—\$51.4-million. (The monthly

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

JUNE 5, 1948

average in 1947 was under \$20-million.) Reports from the Hanover Fair indicate that this trend should keep on.

There were twice as many exhibitors as last year—reflecting better production, more raw materials. There was notable improvement, too, in styling and design.

This year, like last, U. S. buying was chiefly in toys, ceramics, and textile specialties.

Sweden and Britain were bigger buyers. The British went after a wide range of items for re-export.

There's no limit now on the number of foreign businessmen who can enter Bizonia. There had been a quota of 130 monthly.

The Joint Export-Import Agency has also cut the red tape.

All you have to do is get the "sponsorship" of the Commerce Dept. and a military entry permit from the Army. (There's a special military permit section in Army's Civil Affairs Division in Washington.)

Europe's demand for U. S. coal has eased up a lot.

Chief reason is the rise in European production. It's gone up steadily since the start of 1947. For example, in the final quarter of last year the combined output of Britain, Bizonia, and Poland was 108.9-million tons as against 94.6-million tons a year earlier. This equaled 89% of the 1935-38 quarterly average.

British coal exports are an important factor. The continent got almost half a million tons of British coal in April. Last year the quantities were negligible.

A mild winter in Europe helped, too. It provided a chance to build up stocks.

Russia looks for another bumper grain crop this year. And it will have at least 20-million acres more to draw from.

The Kremlin figures that this extra grain will come in handy for trade deals with both eastern and western Europe.

Danish and Dutch missions are now in Moscow working out terms. There's talk in London of renewed Anglo-Russian negotiations for a long-term trade pact (BW-May22'48,p118).

The Soviets apparently have completed their new rail link between Saratov and Baku.

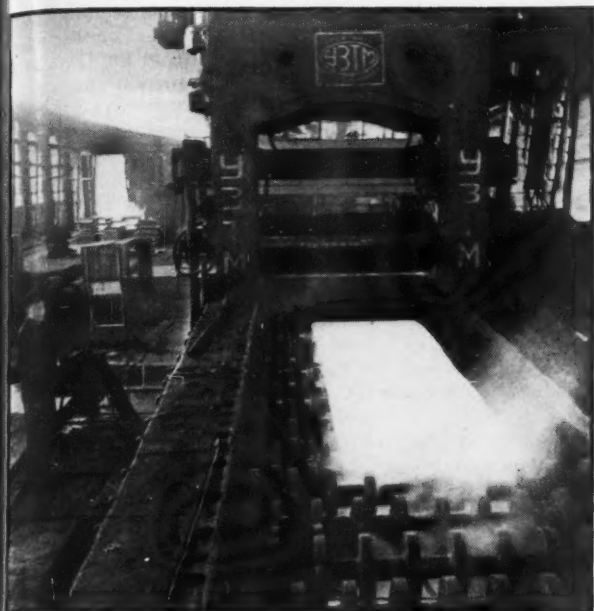
The other day the Kremlin passed out 44 decorations for the job. They went to MVD (secret police) officials. So you can be sure that forced labor had a big hand in the work.

Tata Locomotive & Engineering Co., Ltd., is spending \$22-million on a locomotive plant at Jamshedpur in eastern India.

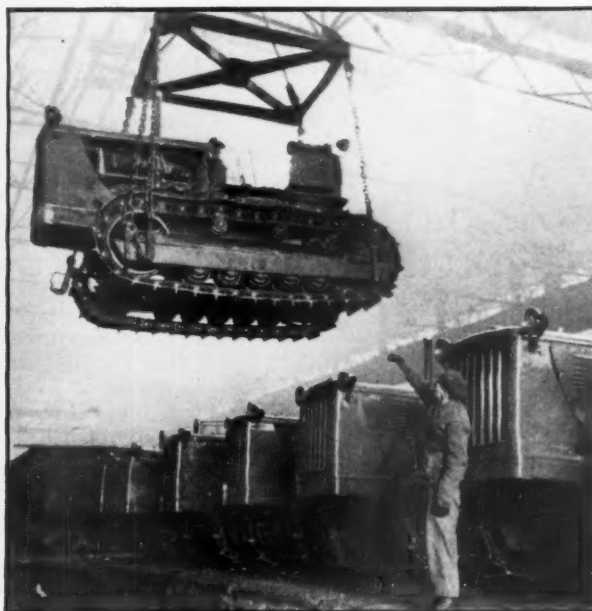
The plant should be completed in 1951 or 1952. Production goal is 100 locomotives and 100 spare boilers a year. This will fill half of India's estimated annual needs of 200 engines. The other half will come from a government plant which is to go up near Asansol, 75 miles north of Jamshedpur.

London reports say that Baldwin Locomotive will help Tata get going. Baldwin is to work with Tata on the design for a new locomotive; also, it is to appoint the Indian company as its agent.

BUSINESS ABROAD



STEEL production, and the output of . . .



TRACTORS are key items in analysis of . . .

Russian Production: How It Stacks Up

	1940	1946	1947	Plan 1950	1947 as % of prewar
Petroleum (million metric tons) . .	31.2	22.9	27.2	35.4	87.1%
Pig iron (million metric tons) . .	14.9	10.0	11.4	19.5	77.5
Steel (million metric tons)	18.3	13.1	14.0	25.4	76.5
Coal (million metric tons)	166	166	175	250	105.4
Tractors (thousands)	34.0	14.0	28.0	112.0	82.4
Cotton textiles (million sq. meters)	4,030	1,891	2,515	4,686	62.4
Woolen textiles (million sq. meters)	124	74	98.6	159	78.4
Power capacity (million kw.)	13.2	12.7	14.7	22.4	111.3
Employment (millions of persons) .	30.4	30.3	31.5	33.5	102.9

How strong is Russia's industry? A straightforward answer to this question could fill in many blanks behind today's headlines.

• **Weakness**—The real facts, of course, are kept under wraps by the Kremlin. But it's a safe bet that the U.S.S.R. is having plenty of economic troubles. It's more than likely, too, that economic weakness lies behind Moscow's current peace offensive (BW—May 22 '48, p115).

The Soviets boast that they surpassed the Five-Year Plan goals for 1947 and for the first quarter of 1948. The production levels of 1940 were supposedly reached toward the end of 1947. But if you take apart the official figures, the picture is a lot less rosy than Moscow makes it out to be.

• **Evidence**—The war hit Russia harder than any country in Europe outside of Germany. And the Soviets' lack of industrial know-how has made their comeback a tedious process. Some telling

evidence comes from the latest issue of "Agitators Handbook"—the bible of Communist Party overseers in Soviet industries. The handbook urges its readers to start clamping down on faulty industrial operations. Last year, the handbook says, more than a quarter of the pistons turned out at the Kolomenskoe railway engine plant had to be scrapped. This year, it adds, matters are even worse: 40% of the pistons were defective in January, 60% in March.

If such practices are commonplace in Russia, the western world isn't supposed to know about them. From the office of Russia's chief planner, Nicolai Voznesensky, comes nothing but glowing tributes.

• **Sure Thing?**—According to Voznesensky's State Planning Commission report, Soviet industry fulfilled 103.5% of the Five-Year Plan requirements in 1947. Twenty-three ministries overshot their production marks by anywhere

from 1% to 15%. Only six ministers didn't deliver their share. This, says Voznesensky's report, makes up for the 1946 lag in production, makes Stalin's promise of completing the plan a year early (in 1949) almost a sure thing.

But Voznesensky's statisticians are slaves to the percentile—a good guard against unseemly comparisons with actual prewar production figures. Trying to grind a few solid facts out of the official percentage figures is not easy.

• **Biggest Achievement**—Unquestionably the greatest Soviet achievement last year was its bumper food crop—58% over that of 1946. This removed the dire threat of famine that hung over the land, certainly spurred the Soviet worker on to whatever production levels were reached in industry. According to the Soviet magazine, Socialist Agriculture, Russia has 20-million more acres under cultivation this year than last.

But the official report plays down what the Russian farmer has done. After two years of basking in the glory of the Kremlin's smiles, he has now been relegated to a back seat. He made too much money selling his products during the war, when the prices he got were 13.5 times higher than normal. Last winter's ruble reform all but wiped out his savings and favored the Soviet factory worker (BW—Dec. 20 '47, p20).

Voznesensky's report makes it clear that the factory worker is the Kremlin's current fair-haired boy. To him is given

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• **Industries**—First place on the report goes to the iron and steel industries. Lumped together, their 1947 production levels were put at 101% of plan requirements. A breakdown of the industries' output doesn't quite add up to this. Cast iron, steel, and rolled iron factories averaged only 94% of plan requirements.

The other 7% is produced through a statistical sleight of hand. In the official report the output of each product is related to the Five-Year Plan requirements in terms of its value. Each industry must meet a prescribed ruble figure. By this means, the overproduction of high-priced products can make up for lags in the cheaper ones. Thus, the physical volume of goods turned out may fall far short of the mark.

• **20% Off**—Official sources won't say just how much iron and steel were produced in Russia last year. But unofficial estimates in Washington put Soviet output of cast iron at 11.4-million tons, its output of steel at 14-million tons. Both of these figures are about 20% off the 1940 pace. The slump is due not so much to wartime destruction as it is to a lack of skilled labor.

The government is putting on a drive to get workers to these industries by offering special food allotments and higher wages as incentives.

• **Coal and Oil**—Russia's 1947 coal output appears in a better light, but is still

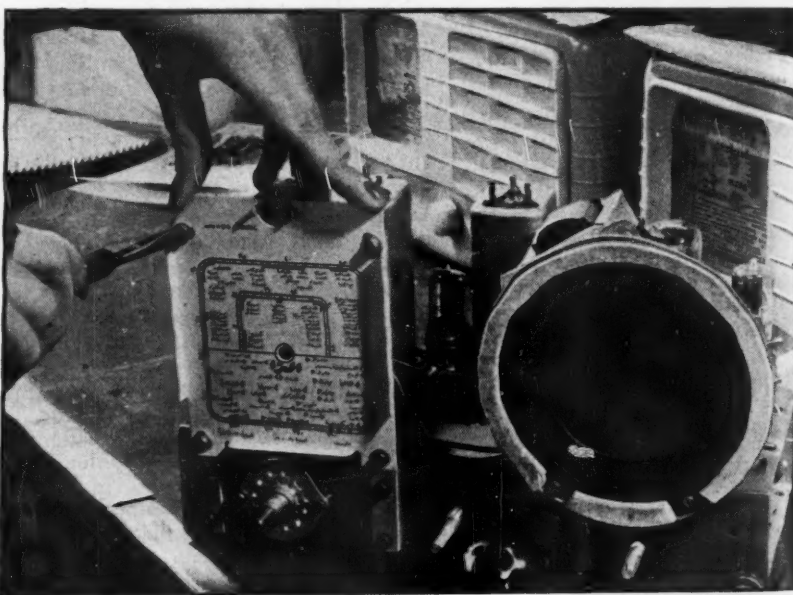
far from meeting industry requirements. Washington estimates that 175-million tons of coal were dug last year—9-million more than in 1940. Much of this was low-grade coal from new mines developed since the war. The high-grade mines of the Donbas in the Ukraine are still in the reconstruction stage.

Voznesensky's report says the Soviet oil industries delivered 5% more than their 1947 target called for. But the total output of 27.2-million tons was still 4-million tons below the 1940 figure. And the oil industry didn't hit even this production rate until after the first quarter of 1948. So, to make the report's percentages valid, oil obtained from Rumania and Austria would have to be included.

• **Tractors and Cars**—The report credits the tractor and automobile industries with hitting 98% of its 1947 target. But the tractor output alone was only 72.8% of plan requirements; the automobile output, only 82.8%. Here the figures are sweetened by counting in the booming production of tanks and armored cars—both of which fall under the Ministry of the Automobile and Tractor Industry.

About 29,000 tractors were turned out in Russia last year—far short of the country's needs. (Since the war, some 137,000 out of a total of 530,000 tractors have gone out of commission.)

• **Agricultural Machinery**—The Ministry of the Agricultural Machinery Industry was also hailed for going over the top



British Radios for the Arab World

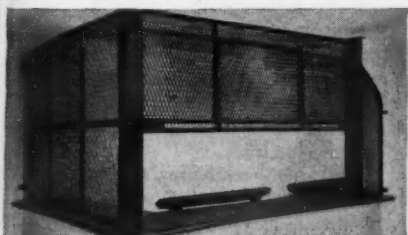
Complete with Arabic dial, this British radio, made by Ultra-Electric Co., Ltd., is out to catch a portion of the export market—on which Britain's radio industry keeps a

sharp eye. Last year the industry exported 404,966 radios, which grossed about \$18.4-million (in sterling). Egypt bought 21,151 in 1947 for just under \$1-million.

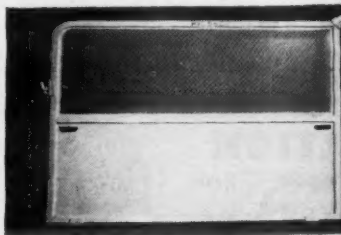


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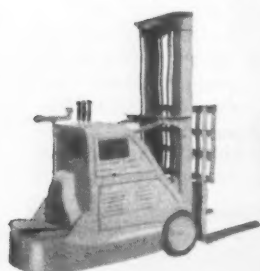


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in its 1947 production. But besides supervising the manufacture of combines, reapers, seeders, and the like, this ministry also has a big stake in the armament industry.

And further doubt was cast on this ministry's record when its chief, Vannikov, was removed recently. He was accused of padding the output figures.

• **Textiles**—The Ministry of the Textile Industry is still way below 1940 production. In fact, textile output dropped so low at one point last year that it caused a public scandal.

The textile industry's dilemma is like that of most light industries in Russia today: no priorities for materials and machinery. This follows the Kremlin's policy of neglecting the consumer-goods lines in favor of the heavy industries. The result has been more and more pleas for the "little things in life" on the part of the Soviet people—and even in the Soviet press (BW—May 8'48, p122).

• **Power**—Reconstruction of power stations is also apparently running behind the Five-Year Plan pace. Despite the official report's claim that the Ministry of Power Stations fulfilled 101% of plan requirements, almost every branch of industry complains of a lack of electric power.

Only skilled engineers and workmen can restore giant installations like the partly destroyed Dneiperstroy Dam—and such people are rare birds in Russia today. Also, only the U. S. could provide certain types of heavy electrical machinery, such as turbines, in a hurry. And that's not a very likely prospect right now.

• **Transportation**—The Five-Year Plan report claims that the freight load on Russian railways and canals rose 10% last year, but this doesn't seem to have been enough. Industries in the Moscow area are operating on low-grade fuel because there aren't enough facilities to bring in higher grades. Consumer goods often lie idle in warehouses for days because of transportation difficulties. This causes wide price variations—sometimes as much as 1,000%—between the cities and the rural areas.

• **Housing**—The Five-Year Plan called for 129-million sq. ft. in floor space of government housing last year, but only 97-million were built. This is only one-sixth of what's needed to restore prewar housing facilities.

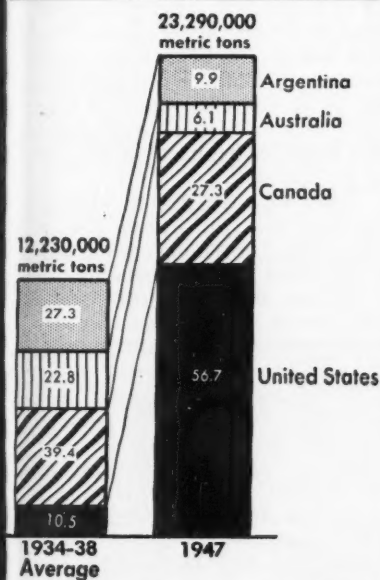
But private individuals turned out 43-million sq. ft. on their own—instead of 11-million as planned. The government granted them liberal loans and special priorities on materials. All of this goes to show that even the Kremlin still puts some stock in incentives.

• **Labor Force**—There were more than 1-million more factory workers in Russia last year—thanks to the Red Army's demobilization program. (Actually, more

soldiers than this left the ranks, but large numbers went to replace women in industry.)

Despite a larger population, there are far fewer factory workers in Russia today than there are in the U. S. (where there are about 43-million). The reason: 55% of Russia's labor force is still down on the farm.

• **Don't Discount Soviet**—While this analysis of official figures shows up Soviet claims, it wouldn't be smart to discount the industrial potential of the U.S.S.R.—especially the war potential. Comparisons with 1940 aren't too valid. For one thing, a big share of the \$11-billion worth of lend-lease equipment which the U. S. sent Russia during the war is still usable. For another, the character of Russia's 1947 output was much different from that of 1940. Chances are that the Soviets could fight as well today as they did in World War II.



WHEAT FROM NEW WORLD

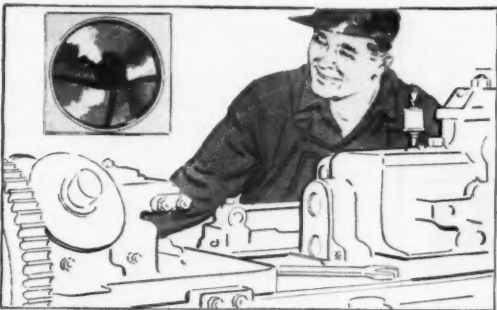
Millions of Europeans these days look to the New World for their daily bread. Last year the U. S. alone exported 13.2-million metric tons of wheat, 56.7% of the total. This was 10.3 times as much as the average U. S. shipments in the 1934-38 period, and more than the U. S. and the other three major exporters shipped in those years. Canadian shipments were also up 30% over the 1934-38 average; last year Canada exported some 6.4-million tons of wheat.

Two of the big shippers last year showed a drop from their 1934-1938 average. Argentine wheat exports fell from 3.3-million tons to 2.3-million tons; Australian wheat exports were down from 2.8-million tons to 1.4-million tons. The reason in both cases: bad harvests.

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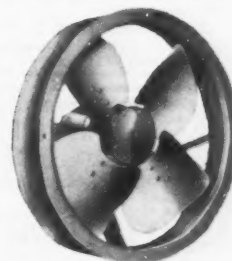
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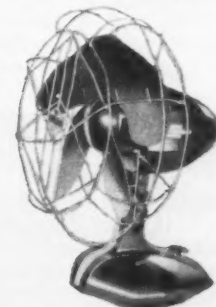
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BUENOS AIRES LETTER

BUENOS AIRES—U. S. salesmen at the court of President Juan Domingo Peron have a tough time getting an audience these days. The president is suffering from an acute dollar shortage. So he's in no position to talk business with U. S. manufacturers.

Argentine industry is suffering right along with Peron. So is the public. Things got so bad a little while ago that an order for eight self-propelled lighters—being made by the Ingalls Shipbuilding Corp., Birmingham, Ala.—was cancelled in a public communiqué.

The plight of Argentina's railways is an even more striking example of what the country is up against. For the railway system is about to fall apart for lack of new equipment.

Last March Peron made much political hay when he bought out British railway holdings in Argentina (BW—Feb. 14 '48, p. 113). But it will all backfire on him if the system bogs down any more.

TODAY, Argentine railways are hauling double the prewar load of grain, cattle, and passengers with less rolling stock than they had in 1939. There are only 3,919 locomotives in operation—37 less than in 1941; many of these are ready for the scrap heap. Grain is rotting in elevators for lack of freight cars. And it is estimated that 5,000 passenger cars are needed immediately.

Peron figures it will take \$200-million worth of equipment to bring his railroads up to snuff. He would like to buy most of it in the U. S. That's where he runs head on into the dollar shortage. And that gives British competitors just the advantage they have been seeking.

Peron has placed about a quarter of the proposed orders. So far, U. S. manufacturers have had the bulk of these. They got their bids accepted before Argentina's dollars ran so low.

Baldwin Locomotive Works and American Locomotive Co. have each received orders for 30 large mountain-type locomotives at a total cost of \$5.6-million. Over half of these have already arrived in Buenos Aires. Lima Locomotive Works, Inc., is building 15 Pacific-type engines for Argentina. And Whitcomb Locomotive Co., a subsidiary of Baldwin Locomotive, is to deliver 212 diesels by the end of this year—at a cost of around \$20-million.

General Electric Co. has received an order for 35 diesel engines and 60 light single-engine locomotives to be delivered sometime in 1949. (G.E. subcontracted an order for 70 diesel engines—two for each locomotive—to the Cooper-Bessemer Corp.) Some 400 steel boxcars, out of orders for 1,000, have already been shipped from Pullman-Standard Car Mfg. Co. and American Car & Foundry Export Corp.

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THE LARGEST BRITISH order so far is for 90 passenger engines from North British Locomotive Co. and Vulcan Co. The locomotives will cost \$12-million (in sterling), are to be delivered sometime this year. That's a relatively small share, but Argentina has plenty of pounds to pay for more.

There are other reasons why, in the long run, the British have a good chance of coming out top dog in supplying Argentine railways.

For one thing, they still have a big stake in Argentine railways, despite Peron's drive against "foreigners meddling in our affairs." Most of the existing railway stock is British. The men running the railways were put there by the British many years ago. Argentines still have to be trained to take over. It is hard to see how British railroaders would turn to anybody but British manufacturers for their equipment.

FURTHERMORE, all purchases for the Argentine railways are still being made in a London office. This means a triple play for U. S. manufacturers. To get a bid in, they have to track down the call in Buenos Aires, get the specifications in London, and arrive at a likely figure in the home plant. And all this won't do them much good if the specifications are specially tailored to British production standards.

U. S. manufacturers were further stymied last fall when the Skoda Works of Czechoslovakia put in a bid of \$94,000 on a type of locomotive the U. S. was ready to supply for \$115,000. Observers will watch with keen interest the delivery date of this order in light of Europe's political upheavals.

Scheduled Contract For Charter Airline

LONDON—It's not often that a charter airline takes on a scheduled service. But Skyways, Ltd., Britain's biggest air-charter operator, has done just that. It has landed a contract with British Overseas Airways Corp. This corporation is a nationalized outfit with a monopoly over all Britain's scheduled air transport services.

Regular Service—Skyways will operate regular BOAC scheduled service once a week between London and Bahrain on the Persian Gulf. The route is via Malta, Cairo, Basra, and Kuwait. BOAC expects much heavier traffic over this route as British and American oil enterprises in the Middle East expand.

BOAC will continue to be the nominal operator; it will provide terminal facilities, hotel accommodations, meals, and flight control services. Skyways will hold up its end of the deal by supplying the planes (DC-4's) and crews.

First Time—Skyways has handled a considerable amount of short-term charter work for BOAC before. Most of this has been carrying passengers when route changes, sudden peaks in traffic, or temporary aircraft shortages occur. This is the first time BOAC has contracted the Skyways' services on a long-term, scheduled basis.



AVIATION ADVISER

Hall L. Hibbard, vice-president and chief engineer of Lockheed Aircraft Corp., is industry adviser to the United States delegation of the International Civil Aviation Organization. Hibbard directed the development of Lockheed's Constellations, the U. S. Army's P-38 fighter (the Lightning), and the P-80 jet (Shooting Star). ICAO begins its second annual meeting in Geneva, Switzerland, this week.

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THE TREND

Limiting Controls

Russia's peace offensive has made some people think that this is the time to get rid of any unpleasant features of U. S. war preparedness. Universal military training is certainly a dead pigeon. The draft will not be as tough as it might have been. Congress will not act on any standby mobilization controls that Truman might ask for.

One of the candidates we have heard mentioned for oblivion is the present voluntary allocation system. That system is supposed to make sure that enough of the scarce industrial materials are available for programs with a national defense angle. Real rough-and-tough allocation, such as we had in wartime, was rejected by Congress as being unnecessary and too stringent in times of peace.

A look at the length and breadth of the programs that voluntary allocation covers and is likely to cover convinces us that it must be continued. It is hard to see how the materials demands, otherwise, can be met for: Marshall Plan exports; Army, Navy, and Maritime Commission requirements; atomic energy projects; freight cars; oil and gas; and housing.

For those programs alone, there will have to be 17-million tons of steel during the next 12 months. Right now, those uses are drawing down steel at the annual rate of 13-million tons of steel. That means 4-million tons more will be needed. Where will it come from? If you are in the automobile business, would you want to give up that much? If you are in the construction business, would you willingly yield so much? Of course you wouldn't. So the only apparent answer is that somebody, some agency, has to move in. Its job is to try to dip those 17-million tons out of the steel production pot with the least interference to other steel consumers.

No one knows this fact better than the steel industry itself. It is no lover of government controls. It would not support a return to a controlled economy as President Truman has twice requested of Congress in the past year. But the steel industry is convinced that the voluntary method must be used if the current job is to be done.

The industry's advisory committee to the Commerce Dept. recently made a set of recommendations. The intention was to make the voluntary program work better. It was not an effort on the part of an industrial group to duck out of a government assignment.

Those recommendations were made because the industry knows the problem it faces as the primary source of steel for the whole world. The problem is as severe as it was in wartime.

In 1937, the U. S. accounted for 38% of world steel output; in 1947, the U. S. produced more than 56% of the total. The gain is due in part to the rise in steel production capacity in this country. It is also due to the lowered output of steel in other countries, chiefly enemy nations.

We must share our steel with other nations to get them back on their feet. We can't evade our responsibilities under the Marshall Plan. We should not quit being big brother to the rest of the world simply because Russia now seems more interested in peace than in war. If this means the continuation of limited controls on our economy for a while longer, it will be a small price to pay for peace insurance.

Use of Injunctions

Almost a year has passed since Business Week presented a thorough analysis of the Taft-Hartley act, which had just become the law of the land (BW—Jun. 12 '47, p15). That analysis said at one place:

"The new law also takes the government deep into the collective bargaining relationship. That happens whenever, in the opinion of the President, a threatened or actual strike or lockout will, if permitted to occur or to continue, 'imperil the national health and safety'."

We pointed out that the prescribed process for handling these national emergency disputes includes a step whereby the President directs the Attorney-General to go to court and get an injunction to end, or prevent, interruption of production. And we noted that the limitations upon the court in issuing such injunctions, which are prohibited in the Norris-LaGuardia act, are set aside.

When President Truman tried to stop Congress from putting the Taft-Hartley law on the books by using his veto power, he said the law would be "clearly a backward step toward the old abuses of the labor injunction." He was saying what labor union leaders had said many times before.

It is too early to say whether the compulsory truce which ensues after an injunction is granted has proven its worth. More time must pass before such a deep appraisal can be made. But it is possible, and it is worthwhile, at this time to consider whether this provision of the law is as unpopular as its critics claim.

One test is being made continually. It is the test of public opinion. For, if the law is to be effective, its enforcement should not antagonize public opinion.

We have had three crises in the coal industry and one in the rail field. Each time, the injunctive process has been invoked. And each time the public apparently has approved what has been done.

The great body of American citizens is opposed to flat prohibitions on strikes. But its belief in the right to strike is not so strong that it opposes a regulatory law that provides a compulsory truce. That belief has been indicated over and over again in public opinion polls since the Taft-Hartley act became operative.

So, until general public opinion finds the use of the injunctive power distasteful, the labor unions will be wasting their time in protests against it.

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